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HISTORY OF ANCIENT POTTERY

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HISTORY OF ANCIENT POTTERY

GREEK, ETRUSCAN, AND ROMAN

BY H. B. WALTERS, M.A., F.S.A.

BASED ON THE WORK OF
SAMUEL BIRCH

IN TWO VOLUMES
VOLUME I

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WITH 300 ILLUSTRATIONS
INCLUDING 8 COLOURED PLATES

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PREFACE

IN 1857 Dr. Samuel Birch issued his well-known work on ancient pottery, at that time almost the first attempt at dealing with the whole subject in a comprehensive manner. Sixteen years later, in 1873, he brought out a second edition, in some respects condensed, in others enlarged and brought up to date. But it is curious to reflect that the succeeding sixteen years should not only have doubled or even trebled the material available for a study of this subject, but should even have revolutionised that study. The year 1889 also saw the completion of the excavations of the Acropolis at Athens, which did much to settle the question of the chronology of Attic vases. Yet another sixteen years, and if the increase in actual bulk of material is relatively not so great, yet the advance in the study of pottery, especially that of the primitive periods, has been astounding; and while in 1857, and even in 1873, it was impossible to do much more than collect and co-ordinate material, in 1905 Greek ceramics have become one of the most advanced and firmly based branches of classical archaeology.

It therefore implies no slur on the reputation of Samuel Birch's work that it has become out of date. Up till now

it has remained the only comprehensive treatise, and therefore the standard work, on the subject; but of late years there has been a crying need, especially in England, of a book which should place before students a condensed and up-to-date account of Greek vases and of the present state of knowledge of the subject. The present volumes, while following in the main the plan adopted by Dr. Birch, necessarily deviate therefrom in some important particulars. It has been decided to omit entirely the section relating to Oriental pottery, partly from considerations of space, partly from the impossibility of doing justice to the subject except in a separate treatise; for the same reason the pottery of the Celts and of Northern Europe has been ignored. Part I. of the present work, dealing chiefly with the technical aspect of the subject, remains in its main outlines much as it was thirty years ago; but the other sections have been entirely re-written. For the historical account of vase-painting in Birch's second edition one chapter of forty pages sufficed; it now extends to six chapters, or one quarter of the work. The subjects on the vases, again, occupy four chapters instead of two; and modern researches have made it possible to treat the subjects of Etruscan and Roman pottery with almost the same scientific knowledge as that of Greece.

A certain amount of repetition in the various sections will, it is hoped, be pardoned on the ground that it was desirable to make each section as far as possible complete in itself; and another detail which may provoke unfavourable criticism is the old difficulty of the spelling of Greek names

and words. In regard to the latter the author admits that consistency has not been attained, but his aim has been rather to avoid unnecessary Latinising on the one hand and pedantry on the other.

Finally, the author desires to express his warmest acknowledgments to all who have been of assistance to him in his work, by their writings or otherwise, especially to a friend, desiring to be nameless, who has kindly read through the proofs and made many useful suggestions; to the invaluable works of many foreign scholars, more particularly those of M. Pottier, M. Salomon Reinach, and M. Déchelette, he owes a debt which even a constant acknowledgment in the text hardly repays. Thanks are also due to the Trustees of the British Museum for kind permission to reproduce their blocks for Figs. 75, 109, 118, 125, 128, 131, 138, 185, 191, and 197, to M. Déchelette for permission to reproduce from his work the vases given in Figs. 224, 226, and to the Committee of the British School at Athens for similar facilities in regard to Plate XIV. (pottery from Crete). Lastly, but by no means least, the author desires to express to Mr. Hallam Murray his deep sense of obligation for the warm interest he has shown in the work throughout and for the pains he has taken to ensure the success of its outward appearance.

H. B. W.

LONDON, *January* 1905.

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BIBLIOGRAPHY OF ANCIENT POTTERY

PART I

PERIODICALS DEALING WITH THE SUBJECT

American Journal of Archaeology. Baltimore and Boston, 1885, etc. In progress. (*Amer. Journ. of Arch.*)

Annali dell' Instituto di corrispondenza archeologica. Rome, 1829–85. (*Ann. dell' Inst.*) Plates of vases re-edited by S. Reinach in *Répertoire des Vases*, vol. i. (1899).

Annual of the British School at Athens. London, 1894, etc. In progress. (*Brit. School Annual.*)

Antike Denkmäler, herausgegeben vom kaiserl. deutschen Institut. Berlin, 1887, etc. In progress. A supplementary atlas to the *Jahrbuch.* (*Ant. Denkm.*)

Archaeologia, or miscellaneous tracts relating to antiquity. London, 1770, etc. Issued by the Society of Antiquaries. In progress.

Archaeological Journal, issued by the Royal Archaeological Institute. London, 1845, etc. In progress. Numerous articles on Roman pottery, etc. in Britain. (*Arch. Journ.*)

Archaeologische Zeitung. Berlin, 1843–85. Vols. vii.-xxv. have the secondary title *Denkmäler, Forschungen und Berichte.* (*Arch. Zeit.*) Plates of vases re-edited by S. Reinach in *Répertoire*, vol. i. (1899).

Archaeologischer Anzeiger. Berlin, 1886, etc. In progress; a supplement bound up with the *Jahrbuch* (new acquisitions of museums, reports of meetings, etc.). (*Arch. Anzeiger.*)

Archaeologische-epigraphische Mittheilungen aus Oesterreich-Ungarn. Vienna, 1877-97. Now superseded by *Jahreshefte.* (*Arch.-epigr. Mitth. aus Oesterr.*)

Athenische Mittheilungen. Athens, 1876, etc. In progress. Organ of the German Archaeological Institute at Athens. (*Ath. Mitth.*)

Berichte der sächsischen Gesellschaft der Wissenschaften. Leipzig, 1846, etc. In progress. Important articles by O. Jahn, 1853–67. (*Ber. d. sächs. Gesellsch.*)

Bonner Jahrbücher. Jahrbücher des Vereins von Alterthumsfreunden im Rheinlande. Bonn, 1842, etc. In progress. Important for notices of pottery, etc., found in Germany, and for recent articles by Dragendorff and others on Roman pottery (Arretine and provincial wares, vols. xcvi., ci., cii., ciii.). (*Bonner Jahrb.*)

Bulletin de Correspondance Hellénique. Athens and Paris, 1877, etc. In progress. (*Bull. de Corr. Hell.*)

Bullettino archeologico Napolitano. Naples, 1842–62. Ser. i. 1842–48. New ser. 1853–62. Re-edited by S. Reinach, 1899. (*Bull. Arch. Nap.*)

Bullettino dell' Instituto di corrispondenza archeologica. Rome, 1829–85. Chiefly records of discoveries in Italy and elsewhere. (*Bull. dell' Inst.*)

Classical Review. London, 1887, etc. In progress. Reviews of archaeological books and records of discoveries.

Comptes-Rendus de la Commission impériale archéologique. Petersburg, 1859–88. Edited by L. Stephani. With folio atlas, re-edited by S. Reinach in *Répertoire*, vol. i. (1899). (Stephani, *Comptes-Rendus.*)

Ἐφημερὶς Ἀρχαιολογική. Athens, 1883, etc. (new series). In progress. Plates of vases, 1883–94, re-edited by S. Reinach in *Répertoire*, vol. i. (1899). (Ἐφ. Ἀρχ.)

Gazette archéologique. Paris, 1875–89. (*Gaz. Arch.*)

Hermes. Zeitschrift für classische Philologie. Berlin, 1866, etc. In progress.

Jahrbuch des kaiserlichen deutschen archaeologischen Instituts. Berlin, 1886, etc. In progress. With *Arch. Anzeiger* (*q.v.*) as supplement and *Antike Denkmäler* (*q.v.*) as atlas. (*Jahrbuch.*)

Jahreshefte des oesterreichischen archaeologischen Institutes. Vienna, 1898, etc. In progress. (*Jahreshefte.*)

Journal of Hellenic Studies. London, 1880, etc. In progress. With atlas in 4to of plates to vols. i.–viii., and supplementary papers (No. 4 on Phylakopi). (*J.H.S.*)

Journal of the British Archaeological Association. London, 1845, etc. In progress. A few articles on Roman pottery in Britain. (*Journ. Brit. Arch. Assoc.*)

Monumenti antichi, pubblicati per cura della R. Accad. dei Lincei. Milan, 1890, etc. In progress. (*Mon. antichi.*)

Monumenti inediti dell' Instituto di corrispondenza archeologica. Rome, 1829–85 (with supplementary volume, 1891). Re-edited (the plates of vases) by S. Reinach in *Répertoire*, vol. i. (1899). (*Mon. dell' Inst.*)

Monuments Grecs, publiés par l'Association pour l'encouragement des Études grecques. Paris, 1872–98. (*Mon. Grecs.*)

Monuments Piot. Fondation Eugène Piot. Monuments et mémoires publiés par l'Académie des Inscriptions. Paris, 1894, etc. In progress.

Museo italiano di antichità classica. 3 vols. Florence, 1885–90. Plates of vases re-edited by S. Reinach in *Répertoire*, vol. i. (1899). (*Mus. Ital.*)

Notizie degli Scavi di Antichità, communicate alla R. Accademia dei Lincei. Rome and Milan, 1876, etc. In progress. Important as a record of recent discoveries in Italy and Sicily. (*Notizie degli Scavi.*)

Philologus. Zeitschrift für das klassische Alterthum. Göttingen, 1846 etc. In progress. With occasional supplementary volumes.

Revue archéologique. Paris, 1844, etc. In progress (four series, each numbered separately). (*Rev. Arch.*)

Römische Mittheilungen. Rome, 1886, etc. In progress. Organ of German Institute at Rome. (*Röm. Mitth.*)

PART II

WORKS ON GREEK VASES

ADAMEK (L.). *Unsignierte Vasen des Amasis.* Prague, 1895 (Prager Studien, Heft v.).

AMELUNG (W.). *Personnificierung des Lebens in der Natur in den Vasenbildern der hellenistischen Zeit.* Munich, 1888. See also Florence.

ANDERSON (W. F. C.). See Engelmann and Schreiber.

Antiquités du Bosphore cimmérien. 3 vols. Petersburg, 1854, fol. Vases, etc., found in the Crimea. (Re-edited in 8vo by S. Reinach, 1892.)

ARNDT (P.). *Studien zur Vasenkunde.* Leipzig, 1887. Adopts Brunn's theory of the late Italian origin of black-figured vases.

Athens (National Museum). *Catalogue des Vases peints,* by M. COLLIGNON and L. COUVE. Paris, 1902. With atlas of photographic plates. The fragments from the Acropolis form the subject of a separate catalogue (in preparation).

Aus der Anomia. Collected articles, some relating to vases. Berlin, 1890.

BAUMEISTER (A.). *Denkmäler des klassischen Alterthums.* 3 vols. Munich, 1884–88. Excellent illustrations of numerous vases accompanying the articles, which are arranged alphabetically in dictionary-form. The article *Vasenkunde,* by Von Rohden, is useful, but now somewhat out of date. (Baumeister.)

BEGER (L.). *Thesaurus Brandenburgicus selectus.* 3 vols. Köln, 1696, fol. Publishes vases belonging to the Elector of Brandenburg (see Vol. I. p. 16).

BENNDORF (O.). *Griechische und sicilische Vasenbilder.* Berlin, 1869–83, fol. Chiefly funerary vases and later fabrics. (Benndorf, *Gr. u. Sic. Vasenb.*) See also *Wiener Vorlegeblätter.*

Berlin. Beschreibung der Vasensammlung im Antiquarium, by A. FURTWAENGLER. Berlin, 1885. 2 vols. With plates of shapes.

BLOCH (L.). *Die zuschauenden Götter in den rothfig. Vasengemälden.* Leipzig, 1888.

BLÜMNER (H.). *Technologie und Terminologie der Gewerbe und Künste.* 4 vols. Leipzig, 1875–86. (Vol. ii. *Arbeit in Thon,* for pottery and terracottas; vol. iii. for building construction.) Out of date in some particulars, but still exceedingly useful, and fairly well illustrated. (Blümner, *Technologie.*)

BOECKH (A.) and others. *Corpus Inscriptionum Graecarum.* 4 vols. Berlin, 1828–77, fol. Vol. iv. contains many vase-inscriptions. (Boeckh, *C.I.G.*)

BÖHLAU (J.). *Aus ionischen und italischen Nekropolen.* Leipzig, 1898, 4to. Indispensable for the study of Ionic vase-fabrics. (Böhlau, *Aus ion. u. ital. Nekrop.*)

Bologna (Museo Civico). *Catalogo dei vasi,* by G. PELLEGRINI. Bologna, 1900. (Plates and cuts.)

BOLTE (J.). *De monumentis ad Odysseam pertinentibus capita selecta.* Berlin, 1882, 8vo.

Bonn. Das akademische Kunstmuseum zu Bonn, by R. KEKULÉ. Bonn, 1872.

Bonner Studien. Aufsätze aus der Alterthumswissenschaft R. Kekulé gewidmet. Berlin, 1890. Collected papers, including several on Greek vases.

Boston. Catalogue of Greek, Etruscan, and Roman vases in the Museum of Fine Arts. Boston, 1893. By E. ROBINSON. Now withdrawn, owing to re-numbering and extensive subsequent accessions, for which see *Boston Museum Reports* (below).

Boston Museum Reports, 1895, etc. In progress from 1896. Issued annually, with full details of new acquisitions, describing many unique specimens. (*Boston Mus. Report.*)

BÖTTIGER (C. A.). *Griechische Vasengemälde.* Weimar and Magdeburg, 1797–1800.

—— *Kleine Schriften.* 3 vols. Dresden, 1837–39.

Bourguignon Collection. Sale Catalogue, 18 March 1901. Paris, 1901. (Best vases not included.)

BRANTEGHEM (A. VAN). See Froehner.

British Museum. Catalogue of the Greek and Etruscan Vases. Vol. i., by C. Smith, in preparation. Vol. ii., Black-figured vases, by H. B. Walters (1893). Vol. iii., Red-figured vases, by C. Smith (1896). Vol. iv., Vases of the later period, by H. B. Walters (1896). (Referred to as *B. M. Cat. of Vases*, or B.M. with number of vase.)

—— *Designs on Greek Vases*, by A. S. Murray and C. Smith. 1894, fol. (Plates of interiors of R.F. kylikes.)

—— *White Athenian Vases*, by A. S. Murray and A. H. Smith. 1896, fol.

—— *Terracotta Sarcophagi*, by A. S. Murray. 1898, fol. (The sarcophagi from Clazomenae, Kameiros, and Cervetri; see Chapters VIII. and XVIII.)

—— *Excavations in Cyprus* (Enkomi, Curium, Amathus). 1900. By A. S. Murray, H. B. Walters, and A. H. Smith.

BRÖNDSTED (P. O.). *A brief description of 32 ancient Greek painted vases, lately found at Vulci by M. Campanari.* London, 1832, 8vo.

BRONGNIART (A.). *Traité des Arts Céramiques*, ou des Poteries considerées dans leur Histoire, leur Pratique, et leur Théorie. 3rd edn., 1877. 2 vols., with Atlas. (Brongniart, *Traité.*) See also Sèvres.

BRUNN (H.). *Geschichte der griechischen Künstler.* 2 vols. Stuttgart, 1859. The second volume has some account of the vase-painters then known.

—— *Probleme in der Geschichte der Vasenmalerei.* Munich, 1871, 4to. Theory of Italian origin of B.F. vases.

—— *Neue Probleme in der Geschichte der Vasenmalerei.* Munich, 1886.

—— *Griechische Kunstgeschichte.* 2 vols. (incomplete). Munich, 1893–97. Deals with some of the earlier fabrics.

—— *Kleine Schriften.* Vol. i. Leipzig, 1898. In progress.

See also Lau.

BULLE (H.). *Die Silene in der archaischen Kunst.* Munich, 1893.

Burlington Fine Arts Club. Catalogue of objects of Greek Ceramic Art (exhibited in 1888), by W. Froehner. (Mostly vases from Branteghem Collection.)

—— *Catalogue of Exhibition of Ancient Greek Art*, 1903, by E. Strong and others. A revised *édition de luxe* (1904) with plates.

Cambridge (Fitzwilliam Museum). *A Catalogue of the Greek vases in the Fitzwilliam Museum*, by E. A. GARDNER. Cambridge, 1897. With plates.

CANESSA (C. and E.). *Collection d'Antiquités*, à l'Hôtel Drouot, 11 May 1903, 4to. Paris, 1903. A sale catalogue of an anonymous collection containing several interesting vases.

CANINO (Prince Lucien Bonaparte of). *Muséum Étrusque de L. Bonaparte, prince de Canino.* Fouilles de 1828 à 1829. Vases peints avec inscriptions. Viterbo, 1829, 4to. With atlas of plates, of which only one part was published.

—— *Catalogo di scelte Antichità Etrusche trovate negli Scavi del Pr. di Canino*, 1828-29. Viterbo, 1829, 4to.

CAYLUS (A. C. P. de). *Recueil d'antiquités égyptiennes, étrusques, grecques et romaines.* 7 vols. Paris, 1752-67, 4to. (Vases given in vols. i. and ii.)

CESNOLA (L. P. di). *Cyprus: its ancient cities, tombs, and temples.* (With a chapter on the pottery, by A. S. Murray.) London, 1877, 8vo.

CHRISTIE (J.). *Disquisitions upon the Painted Vases*, and their connection with the Eleusinian Mysteries. London, 1825, 4to. (See Vol. I. p. 21.)

COLLIGNON (M.). See Athens, Rayet.

Commentationes philologae in honorem T. Mommseni. Berlin, 1877, 4to. Several useful papers on vases.

CONZE (A.). *Melische Thongefässe.* Leipzig, 1862. Folio plates.

—— *Zur Geschichte der Anfänge griechischer Kunst.* Vienna, 1870, 8vo. See also *Wiener Vorlegeblätter.*

COREY (A. D.). *De Amazonum antiquissimis figuris.* Berlin, 1891, 8vo.

COUVE (L.). See Athens.

DAREMBERG (C.) and SAGLIO (E.), and subsequently E. POTTIER. *Dictionnaire des antiquités grecques et romaines.* Paris, 1873, etc. In progress (to M in 1904). (Daremberg and Saglio.) Special reference should be made to the articles Figlinum, Forma, Lucerna, and those on vase-shapes. The bibliographies are very exhaustive.

DENNIS (G.). *The Cities and Cemeteries of Etruria.* 2 vols. London, 1878 (2nd edn.), 8vo. Introductory matter on vases antiquated; useful as record of discoveries, etc. (Dennis, *Etruria.*)

DES VERGERS (N.). *Étrurie et les Étrusques.* 2 vols. and atlas. Paris, 1862-64. Some fine vases published.

DISNEY (J.). *Museum Disneianum*, being a description of a collection of various ancient fictile vases in the possession of J. D. (now at Cambridge). London, 1846, 4to.

DUBOIS-MAISONNEUVE (A.). *Introduction à l'étude des vases antiques d'argile peints.* Paris, 1817, fol. (Dubois-Maisonneuve, *Introd.*)

DUMONT (A.), *Inscriptions céramiques de Grèce.* Paris, 1872, 8vo. (Inscriptions on handles of wine-amphorae.)

—— *Vases peints de la Grèce propre.* Paris, 1873. (Reprinted from the *Gazette des Beaux Arts.*)

—— *Les Céramiques de la Grèce propre;* histoire de la peinture des vases grecs depuis les origines jusqu'au V. siècle avant Jésus-Christ. Illustrations by J. Chaplain. Revised by E. Pottier. 2 vols. Paris, 1888-90.

Vol. i., on earlier vase fabrics (now becoming out of date); plates mostly of later vases. Vol. ii., miscellaneous papers (vases, terracottas, etc.). (Dumont-Pottier.)

ENDT (J.). *Beiträge zur ionischen Vasenmalerei.* Prague, 1899, 8vo. (Endt, *Ion. Vasenm.*)

ENGELMANN (R.). *Bilder-Atlas zum Homer.* Leipzig, 1889. Translated by W. F. C. Anderson: *Pictorial Atlas to Homer's Iliad and Odyssey.* London, 1892. (Engelmann-Anderson.)

—— *Archaeologische Studien zu den Tragikern.* Berlin, 1900.

Eranos Vindobonensis (collected papers). Vienna, 1893, 8vo.

FEA (C.). *Storia dei vasi fittili dipinti* che si trovano nell' antica Etruria. Rome, 1832. (Dealing with "Etruscan" theory.)

Festschrift für Johannes Overbeck (collected papers). Leipzig, 1893, 4to.

Festschrift für Otto Benndorf zu seinem 60. Geburtstage gewidmet (collected papers). Vienna, 1898, 4to.

FIORELLI (G.). *Notizia dei vasi dipinti rinvenuti a Cuma nel 1856.* Naples, 1857. Plates reproduced in *Bull. Arch. Nap.* (*q.v.*).

FLASCH (A.). *Angebliche Argonautenbilder.* Munich, 1870.

—— *Die Polychromie der griechischen Vasenbilder.* Würzburg, 1875.

Florence. Führer durch die Antiken in Florenz, by W. AMELUNG. Munich, 1897.

FÖRSTER (P. R.). *Hochzeit des Zeus und der Hera,* Relief der Schaubert'schen Sammlung in . . . . Breslau. Breslau, 1867, 4to.

—— *Der Raub und die Rückkehr der Persephone.* Stuttgart, 1873.

FROEHNER (W.). *Choix de vases grecs inédits de la collection du Prince Napoléon.* Paris, 1867, fol.

—— *Deux peintures de vases grecs de la nécropole de Kameiros.* Paris, 1871, fol.

—— *Musées de France.* Recueil de monuments antiques. Paris, 1873, fol.

—— *Collection de M. Albert B(arre).* Paris, 1878, 4to. (Sale catalogue.)

—— *Collection Eugène Piot,* Antiquités. Paris, 1890. (Sale catalogue.)

—— *Collection van Branteghem.* Brussels, 1892, fol., with plates. (Sale catalogue.)

—— *Collection d'antiquités du Comte Michael Tyszkiewicz.* Paris, 1898. (Sale catalogue.)

And see Burlington Fine Arts Club, Marseilles Mus.

FURTWAENGLER (A.). *Eros in der Vasenmalerei.* Munich, 1875, 8vo.

—— *Collection Sabouroff.* 2 vols. (the first giving vases). Berlin, 1883–87, 4to. (Also a German edition; the vases now in Berlin.)

—— *Orpheus, Attische Vase aus Gela* (in *5otes Winckelmannsfestprogr.*, 1890).

—— *Neuere Fälschungen von Antiken.* Munich, 1899, 4to.

—— and LOESCHCKE (G.). *Mykenische Thongefässe.* Berlin, 1879, obl. fol.

—— —— *Mykenische Vasen:* Vorhellenische Thongefässe aus dem Gebiete des Mittelmeeres. Berlin, 1886, 4to, with atlas in fol.

—— and REICHHOLD (C.). *Die griechische Vasenmalerei,* Auswahl

hervorragender Vasenbilder. Munich, 1900, etc. Text by A. F. and C. R.; plates (separate) by C. R.
And see Berlin, Genick.

GARDNER (E. A.). See Cambridge, Naukratis.

GARDNER (P.). See Oxford.

GARGIULO (R.). *Cenni sulla maniera di rinvenire i vasi fittili Italo-Greci.* Naples, 1831; 2nd edn., 1843.

—— *Raccolta de Monumenti più interessanti del Real Mus. Borb.* Naples, 1825–3–. 2 vols. of plates.

GENICK (A.) and FURTWAENGLER (A.). *Griechische Keramik.* 4to. Tafeln ausgewählt und aufgenommen von A. G., mit Einleitung und Beschreibung von A. F. 2nd edn. Berlin, 1883, 4to.

GERHARD (E.). *Antike Bildwerke.* Munich, 1828–44. Text in 8vo and plates in fol.

—— *Berlins antike Bildwerke.* Berlin, 1836, 8vo.

—— *Griechische und etruskische Trinkschalen* des königl. Museums zu Berlin. Berlin, 1840, fol.

—— *Auserlesene griechische Vasenbilder.* 4 vols. Berlin, 1840–58. (Gerhard, *A. V.*) Re-edited by S. Reinach, *Répertoire*, vol. ii. (1900).

—— *Etruskische und campanische Vasenbilder* des königl. Museums zu Berlin. Berlin, 1843, fol.

—— *Apulische Vasenbilder* des königl. Museums zu Berlin. Berlin, 1845, fol.

—— *Trinkschalen und Gefässe* des königl. Museums zu Berlin und anderer Sammlungen. Berlin, 1848–50, fol.

—— *Gesammelte akademische Abhandlungen und kleine Schriften.* 2 vols. in 8vo and atlas in 4to. Berlin, 1866–68. (Chiefly papers on mythology, illustrated by vases.)

GIRARD (P.). *La Peinture antique.* Paris, 1892. Vases as illustrative of Greek painting.

GORI (A. F.). *Museum Etruscum.* 3 vols. Florence, 1737–43, fol.

GSELL (S.). *Fouilles dans la nécropole de Vulci*, exécutées et publiées aux frais de Prince Torlonia. Paris, 1891, 4to.

HANCARVILLE (P. F. HUGUES, *pseud.* D'). *Antiquités étrusques, grecques, et romaines*, tirées du cabinet de M. Hamilton. 4 vols. folio, 1766–67.

HARRISON (JANE E.). *Myths of the Odyssey in art and literature.* London, 1882, 8vo.

—— *Mythology and Monuments of Ancient Athens* (with translation from Pausanias, by M. de G. Verrall). London, 1890. Introduction important for vases relating to Attic cults.

—— *Prolegomena to Greek Religion.* Cambridge, 1903. Numerous vases interpreted with reference to mythology and religion.

—— and MACCOLL (D. S.). *Greek Vase-paintings.* London, 1894.

Harrow School Museum. Catalogue of the classical antiquities from the collection of the late Sir G. Wilkinson, by CECIL TORR. Harrow, 1887, 8vo.

HARTWIG (P.). *Die griechischen Meisterschalen des strengen rothfigurigen Stils.* Stuttgart, 1893, 4to, with atlas in fol. Invaluable for a study of cups of R.F. period.

HELBIG (W.). *Das homerische Epos, aus den Denkmälern erlautert.* 2nd edn. Leipzig, 1884, 8vo. (Vases used to illustrate civilisation of Homeric poems.)

—— *Les vases du Dipylon et les naucraries.* Paris, 1898, 4to.

—— *Eine Heerschau des Peisistratos oder Hippias auf einer schwarzfigurigen Schale.* Munich, 1898, 8vo.

—— *Les Ἱππεῖς Athéniens.* Paris, 1902, 4to.

And see Rome.

HERMANN (P.). *Das Gräberfeld von Marion auf Cypern.* Berlin, 1888, 4to. An account of the finds by O. Richter and others at Poli, Cyprus. (*48tes Winckelmannsfestprogr.*)

HEYDEMANN (H.). *Iliupersis auf einer Trinkschale des Brygos.* Berlin, 1866, fol.

—— *Humoristische Vasenbilder aus Unteritalien.* Berlin, 1870. (*30tes Winckelmannsfestprogr.*)

—— *Griechische Vasenbilder.* Berlin, 1870, fol. (Chiefly vases at Athens.)

—— *Nereiden mit den Waffen des Achill.* Halle, 1879, fol.

—— *Satyr und Bakchennamen.* Halle, 1880. (*5tes hallische Festprogr.*). Numerous other monographs, chiefly Hallische or Winckelmannsfest-programme.

And see Naples.

HIRSCHFELD (G.). *Athena und Marsyas.* Berlin, 1872.

HOPPIN (J. C.). *Euthymides;* a study in Attic vase-painting. Leipzig, 1896.

HUDDILSTON (J. H.). *Greek Tragedy in the light of vase-paintings.* London and New York, 1892.

—— *Lessons from Greek Pottery.* London and New York, 1902. With bibliography.

INGHIRAMI (F.). *Monimenti etruschi o di etrusco nome.* Ser. 5. Vasi fittili. Fiesole, 1824, 4to.

—— *Galeria Omerica.* 3 vols. Fiesole, 1831–36.

—— *Etrusco Museo Chiusino.* 2 vols. Fiesole, 1832–34, 4to.

—— *Pitture di vasi fittili.* 4 vols. Fiesole, 1833–37.

—— *Pitture di vase etruschi.* 4 vols. Florence, 1852–56. (A second edition of the preceding work.)

JAHN (O.). *Telephos und Troilos.* Kiel, 1841, 8vo.

—— *Ueber Darstellungen griechischer Dichter auf Vasenbildern.* Leipzig, 1861. (From *Abhandl. des sächs. Gesellsch.* viii.)

—— *Archaeologische Aufsätze.* Greifswald, 1845, 8vo.

—— *Archaeologische Beiträge.* Berlin, 1847, 8vo.

—— *Beschreibung der Vasensammlung Königs Ludwigs in der Pinakothek zu München.* Munich, 1854, 8vo. (*Vasens. zu München.*) The *Einleitung* (Introduction) gives a *résumé* of the whole subject.

—— *Ueber bemalte Vasen mit Goldschmuck.* Leipzig, 1865, 4to.

—— *Die Entführung der Europa* auf antiken Kunstwerken. Vienna, 1870, 4to.

JATTA (G.). *Catalogo del Museo Jatta* (at Ruvo). Naples, 1869, 8vo.

Karlsruhe. Beschreibung der Vasensammlung der grossherzoglichen vereinigte Sammlungen zu Karlsruhe, by H. WINNEFELD. 1887, 8vo.

KARO (G.). *De arte vascularia antiquissima quaestiones.* Bonn, 1896, 8vo.

KEKULÉ (R. VON, now KEKULE VON STRADONITZ). See Bonn.

KIRCHHOFF (A.). *Studien zur Geschichte des griechischen Alphabets.* 4th edn. Gütersloh, 1887.

KLEIN (W.). *Euphronios;* eine Studie zur Geschichte der griechischen Malerei. 2nd edn. Vienna, 1886, 8vo.

—— *Die griechischen Vasen mit Meistersignaturen.* 2nd edn. Vienna, 1887, 8vo.

—— *Die griechischen Vasen mit Lieblingsinschriften.* 2nd edn. Vienna, 1898.

KNAPP (P.). *Nike in der Vasenmalerei.* Tübingen, 1876, 8vo.

Kopenhagen. De malede Vaser i Antikkabinettet i Kjöbenhavn. Kopenhagen, 1862. Catalogue of the vases, by S. Birket Smith. (Referred to as Kopenhagen, with number of vase.)

KRAMER (G.). *Ueber den Styl und die Herkunft der bemalten griechischen Thongefässe.* Berlin, 1837.

KRAUSE (J. H.). *Angeiologie.* Halle, 1854, 8vo. (Study of vase-shapes and their names.)

KRETSCHMER (P.). *Die griechischen Vaseninschriften ihrer Sprache nach untersucht.* Gütersloh, 1894.

LA BORDE (A. DE). *Collection des vases grecs de M. le Comte de Lambert.* 2 vols. Paris, 1813–28, fol. The vases are now at Vienna. Re-edited by S. Reinach in *Répertoire*, vol. ii. (1900).

LA CHAUSSE (M. A. de = Caussius). *Romanum Museum.* Rome, 1690; 3rd edn., 1746.

LANZI (L.). *Dei vasi antichi dipinti volgarmente chiamati Etruschi.* Florence, 1806.

LAU (TH.), BRUNN (H.), and KRELL (P.). *Die griechischen Vasen, ihre Formen und Decorationssystem.* Plates and text. From originals at Munich. Leipzig, 1877. (Brunn-Lau, *Gr. Vasen.*)

LENORMANT (C.) and DE WITTE (J.). *Élite des monuments céramographiques.* 4 vols. Paris, 1837–61, 4to. (*Él. Cér.*)

LETRONNE (J. A.). *Observations sur les noms de vases grecs.* Paris, 1833.

London. See British Museum.

LONGPÉRIER (H. A. PRÉVOST DE). *Musée Napoléon III.* Choix de monuments antiques . . . Texte explicatif par A. de L. Paris, unfinished, 1868–74, 4to.

Louvre. See Paris.

LÜTZOW (C. VON). *Zur Geschichte des Ornaments an den bemalten griechischen Thongefässen.* Munich, 1858.

LUYNES (H. D'A. DE). *Description de quelques vases peints,* étrusques, italiotes, siciliens et grecs. Paris, 1840, fol. The vases are now in the Bibliothèque Nationale. Re-edited by S. Reinach, *Répertoire,* ii, (1900).

MACCOLL (D. S.). See Harrison.

MACPHERSON (D.). *Antiquities of Kertch*, and researches in the Cimmerian Bosphorus, etc. London, 1857, 4to. (Discoveries in the Crimea.)

Madrid (Museo arquelogico nacional). *Catalogo del Museo*, by A. G. Gutierrez and J. de D. de la Rada y Delgado. Part i. Madrid, 1883, 8vo.

Marseilles. Catalogue des antiquités grecques et romaines du Musée, by W. FROEHNER. 1897.

MARTHA (J.). *L'Art Étrusque.* Paris, 1889, 4to.

MASNER (K.). See Vienna.

MAYER (M.). *Die Giganten und Titanen in der antiken Sage und Kunst.* Berlin, 1886.

Mélanges Perrot. Paris, 1902, 4to. (Collected papers in honour of Perrot.) (Recueil de mémoires concernant l'archéologie classique, la littérature, et l'histoire anciennes, dedié à Georges Perrot.)

MICALÌ (G.). *Storia degli antichi popoli Italiani.* 3 tom. Firenze, 1832, 8vo. With atlas entitled *Monumenti per servire alla storia*, etc. Fol.

—— *Monumenti inediti a illustrazione della storia degli antichi popoli italiani.* Florence, 1844, 8vo, plates in fol. Vases found in Etruria. (Micali, *Mon. Ined.*)

MILCHHOEFER (A.). *Die Anfänge der Kunst in Griechenland.* Leipzig, 1883, 8vo.

MILLIET (P.). *Études sur les premières périodes de la céramique grecque.* Paris, 1891.

MILLIN (A. L.). *Peintures des vases antiques.* 2 vols. Paris, 1808–10, fol. The *Introduction* of Dubois-Maisonneuve (*q.v.*) was published uniform with this. Re-edited by S. Reinach in 4to, Paris, 1891. (Millin-Reinach.)

MILLINGEN (F.). *Ancient Unedited Monuments* of Grecian Art. 2 vols. in one. London, 1822–26. (Millingen, *Anc. Uned. Monum.*)

—— *Peintures antiques de vases grecs, tirées de diverses collections.* Rome, 1813, fol. Re-edited by S. Reinach in 4to, Paris, 1891. (Millingen-Reinach.)

—— *Peintures antiques de vases grecs de la collection de Sir J. Coghill.* Rome, 1817, fol. Re-edited by S. Reinach in *Répertoire*, ii. (1900).

MORGENTHAU (J. C.). *Ueber den Zusammenhang der Bilder auf griechischen Vasen.* I. Die schwarzfigurigen Vasen. Leipzig, 1886. 8vo.

MOSES (H.). *A collection of antique vases, etc.*, from various museums and collections. London, 1814.

—— *Vases from the collection of Sir Henry Englefield.* London, 1848.

MUELLER (E.). *Drei griechische Vasenbilder.* Zurich, 1887. 4to.

MÜLLER (K. O.). *Denkmäler der Alten Kunst.* 1832–69, obl. fol. 2 vols. (2nd re-edited by F. Wiestler).

—— —— Theil ii. 3rd edn., 1877. Text 4to; plates, 1881, obl. fol.

Munich. Beschreibung der Vasensammlung König Ludwigs in der Pinakothek, by O. JAHN. Munich, 1855. With admirable introduction. See also the guide (*Führer*) published in 1895. A new catalogue by Furtwaengler said to be in progress.

MURRAY (A. S.). *Handbook of Greek Archaeology.* London, 1892. (Chaps. i. and ii. deal with vases.) And see British Museum.

Museo Borbonico. Naples, 1824–57. 16 vols., 4to. Illustrations of the collections in the Naples Museum (Real Museo Borbonico). See also Gargiulo.

Museo Gregoriano. Museo Etrusci . . . in Aedibus Vaticanis . . . Monumenta. 2 vols. (vases in 2nd). Rome, 1842, fol. (*Mus. Greg.*)

MYRES, J. L. See Nicosia.

Naples. Die Vasensammlungen des Museo Nazionale zu Neapel, by H. HEYDEMANN. Berlin, 1872. See also Gargiulo, Museo Borbonico.

Naukratis, I. and *II.* Third and Sixth Memoirs of the Egypt Exploration Fund, by W. M. Flinders Petrie, E. A. Gardner, etc. London, 1886–88. Plates of pottery found at Naukratis, discussed in text by C. Smith and E. A. Gardner.

Nicosia (Cyprus Museum). *A Catalogue of the Cyprus Museum,* by J. L. MYRES and M. OHNEFALSCH-RICHTER. Oxford, 1899.

OHNEFALSCH-RICHTER (M.). *Kypros, the Bible, and Homer.* 2 vols., text and plates. Berlin, 1893. Also a German edition. Useful for collected examples of Cypriote pottery and terracottas. See also Nicosia.

OVERBECK (J.). *Die Bildwerke zum thebischen und troischen Heldenkreis.* 2 vols., text and atlas. Brunswick and Stuttgart, 1853–57. Lists of vases illustrating Theban and Trojan legends. (Overbeck, *Her. Bildw.*)

—— *Griechische Kunstmythologie.* Vols. ii.–iv. only published (Zeus, Hera, Poseidon, Demeter, Apollo, and myths connected with them). Leipzig, 1871–89. With atlas in fol. (Overbeck, *Kunstmythol.*)

Oxford (Ashmolean Museum). *Catalogue of the Greek Vases in the Ashmolean Museum,* by P. GARDNER. Oxford, 1893. With coloured plates.

PANOFKA (T.). *Vasi di premio illustrati.* Florence, 1826.

—— *Musée Blacas.* Paris, 1829, fol. Vases mostly in B.M.

—— *Recherches sur les véritables noms des vases grecs.* Paris, 1829.

—— *Antiques du cabinet du comte Pourtalès-Gorgier.* Paris, 1834, 4to. (Panofka, *Cab. Pourtalès.*)

—— *Bilder antiken Lebens.* Berlin, 1843, 4to.

—— *Griechinnen und Griechen nach Antiken skizzirt.* Berlin, 1844, 4to.

—— *Der Vasenbilder Panphaios.* Berlin, 1848.

—— *Von den Namen der Vasenbildner in Beziehung zu ihren bildlichen Darstellungen.* Berlin, 1849, 4to.

—— *Die griechischen Eigennamen mit* καλός in Zusammenhang mit dem Bilderschmuck auf bemalten Gefässen. Berlin, 1850.

(And many other pamphlets with publication of vases, chiefly from the mythological point of view, but now out of date.)

Paris (Louvre). *Catalogue des vases antiques de terre cuite,* by E. POTTIER. Paris, 1896, etc. In progress (two volumes issued, dealing with earlier fabrics). With accompanying atlas of photographic plates (2 vols., down to Euphronios).

Paris (Bibliothèque Nationale). *Catalogue des vases dans le Cabinet des Médailles*, by A. DE RIDDER. Paris, 1901–02. 2 vols. With plates.

PASSERI (J. B.). *Picturae Etruscorum in Vasculis.* 3 vols. Rome, 1767–75, fol.

PATRONI (G.). *Ceramica antica nell' Italia meridionale.* Naples, 1897. A useful study of Greek and local fabrics of Southern Italy.

PELLEGRINI (G.). See Bologna.

PERROT (G.) and CHIPIEZ (C.). *Histoire de l'art dans l'antiquité.* (Text by Perrot, plates by Chipiez.) In progress: 8 vols. published in 1882–1904. Vol. iii., Cypriote pottery; vol. vi., Mycenaean; vol. vii., Dipylon. (Perrot, *Hist. de l'Art.*)

Petersburg. Vasensammlung der kaiserlichen Ermitage, by L. STEPHANI. Petersburg, 1869. 2 vols.

POLLAK (L.). *Zwei Vasen aus der Werkstatt Hierons.* Leipzig, 1900.

POTTIER (E.). *Étude sur les lécythes blancs attiques à représentations funéraires.* Paris, 1883, 8vo. (Bibliothèque des Écoles françaises, No. 30.)

—— *La peinture industrielle chez les Grecs.* Paris, 1898, 8vo.

—— and REINACH (S.). *La Nécropole de Myrina.* 2 vols. Paris, 1887.

See also Daremberg, Dumont, Paris.

RAOUL-ROCHETTE. *Monumens inédits d'antiquité figurée.* Paris, 1833, fol.

—— *Peintures antiques inédites.* Paris, 1836, 4to.

RAVESTEIN (E. DE M. DE). *Musée de Ravestein*; Catalogue descriptif. 2 vols. Liège, 1871–72, 8vo.

RAYET (O.) and COLLIGNON (M.). *Histoire de la céramique grecque.* Paris, 1888. (More or less popular, and becoming out of date; well illustrated.) (Rayet and Collignon.)

REINACH (S.). *Chroniques d'Orient.* Paris, 1891–96. 2 vols. Reprinted from the *Revue Archéol.* (1883–95). Notes of discoveries, etc.

—— *Répertoire des Vases Peints.* Paris, 1899–1900. 2 vols. An invaluable re-editing, with outline reductions of the plates, of many publications of vases, with bibliographical notes and explanations appended. See Gerhard, Laborde, de Luynes, Tischbein, etc., and list of periodicals. (Referred to as *Reinach*, with number of volume and page. In Chapters XII.–XV. the references are all to this publication in preference to the original works.)

See also Millin, Millingen, *Ant. du Bosph. Cimm.*, and Pottier.

REISCH (E.). See Rome.

RIDDER (A. DE). See Paris.

RIEGL (A.). *Stilfragen.* Grundlegungen zu einer Geschichte der Ornamentik. Berlin, 1893, 8vo. A valuable study of early vegetable ornament on vases.

ROBERT (C.). *Thanatos.* Berlin, 1879, 4to. (*39tes Winckelmannsfestprogr.*)

—— *Bild und Lied.* Berlin, 1881, 8vo. On the relation of vase-paintings to the Homeric poems.

—— *Archaeologische Märchen* aus alter und neuer Zeit. Berlin, 1886, 8vo. Papers on various subjects, more or less controversial.

—— *Homerische Becher.* (*50tes Winckelmannsfestprogr.*) Berlin, 1890.

ROBERT (C.). *Scenen der Ilias und Aithiopis* auf einer Vase der Sammlung des Grafen M. Tyszkiewicz. Halle, 1891, fol. (*15tes Hall. Winckelmannsprogr.*)

—— *Die Nekyiades Polygnot.* Halle, 1892. (*16tes Hallisches Festprog.*; a restoration of the painting on the basis of vases.)

—— *Die Iliupersis des Polygnot.* Halle, 1893. (*17tes Hallisches Festprogr.*; dealing similarly with that painting.)

—— *Die Marathonschlacht in der Poikile* und weiteres über Polygnot. (*18tes Hallisches Festprogr.*) Halle, 1895.

ROBERTS (E. S.). *An Introduction to Greek Epigraphy.* Part i. The archaic inscriptions and the Greek alphabet. Cambridge, 1887, 8vo.

ROBINSON (E.). See Boston.

ROEHL (H.). *Inscriptiones Graecae antiquissimae* praeter Atticas in Attica repertas. Berlin, 1882, fol. (Roehl, *I.G.A.*)

ROHDEN (H. VON). See Baumeister.

Rome (Vatican, Museo Gregoriano). *Führer durch die öffentlichen Sammlungen in Rom*, by W. HELBIG and E. REISCH. 2nd edn., 1899. 2 vols. In vol. ii. is given a full description of the best vases (about 250) in this collection; they are quoted as Helbig 1, 2, 3, etc., according to the numbers of the book. See also *Museo Gregoriano.*

ROSCHER (W. H.). *Ausführliches Lexikon der griechischen und römischen Mythologie.* Leipzig, 1884, etc. In progress (down to P in 1904). Many vases published in the later parts.

ROSS (L.). *Reisen auf die griechischen Inseln des ägäischen Meeres.* Halle, 1840–52, 4 vols., 8vo.

—— *Archaeologische Aufsätze.* 2 vols. Leipzig, 1855–61. With plates in fol.

ROULEZ (J.). *Choix de vases peints du Musée d'antiquités de Leyde.* Gand, 1854. Re-edited by S. Reinach, *Répertoire*, vol. ii., 1900.

Ruvo (Museo Jatta). See Jatta.

SALZMANN (A.). *Nécropole de Camiros.* Paris, 1866–75, fol. Plates only.

SCHLIEMANN (H.). See Vol. I. p. 269.

SCHNEIDER (A.). *Der troische Sagenkreis in der älteren griechischen Kunst.* Leipzig, 1886.

SCHNEIDER (F. J.). *Die zwölf Kämpfe des Herakles in der älteren griechischen Kunst.* Leipzig, 1888.

SCHNEIDER (R.). *Die Geburt der Athena.* Vienna, 1880, 8vo.

SCHÖNE (R.). *Le antichità del Museo Bocchi di Adria.* Rome, 1878, 4to.

SCHREIBER (TH.) and ANDERSON (W. C. F.). *Atlas of Classical Antiquities.* London, 1895, obl. 8vo. (Schreiber-Anderson.)

SCHULZ (H. W.). *Die Amazonenvase von Ruvo*, erklärt und in Kunsthistorischer Beziehung betrachtet. Leipzig, 1851, fol. See Reinach, *Répertoire*, vol. ii.

Sèvres Museum. Description méthodique du Musée Céramique de Sèvres, by A. BRONGNIART and D. RIOCREUX. Paris, 1845. 2 vols., with atlas of plates.

SITTL (K.). *Die Phineusschale und ähnliche Vasen mit bemalten Flachreliefs.* Würzburg, 1892.

SMITH (A. H.). See British Museum.
SMITH (CECIL). *Catalogue of the Forman Collection of Antiquities* (illustrated). London, 1899. And see British Museum.
SMITH (S. B.). See Kopenhagen.
STACKELBERG (O. M. VON). *Die Gräber der Hellenen.* Berlin, 1836, fol.
STEPHANI (L.). See Petersburg and *Compte-Rendu.*
Strena Helbigiana. (Collected papers in honour of W. Helbig.) Leipzig, 1900, 8vo.
STUDNICZKA (F.). *Kyrene, eine altgriechische Göttin.* Leipzig, 1890.

Tanis II. Fourth Memoir of the Egypt Exploration Fund (Tell-Nebesheh and Defenneh). London, 1887. By W. M. F. PETRIE and F. L. GRIFFITH, with notes on the Daphnae pottery by A. S. Murray.
THIERSCH (F.). *Ueber die hellenischen bemalten Vasen,* mit besonderer Rücksicht auf die Sammlung des Königs Ludwigs von Bayern. Munich, 1849. From *Abhandl. d. k. bayer. Akad., Philosoph.-philol. Classe,* vol. iv.
THIERSCH (H.). *Tyrrhenische Amphoren.* Eine Studie zur Geschichte der altattischen Vasenmalerei. Leipzig, 1899.
TISCHBEIN (W.). *Collection of engravings from ancient vases* (the second Hamilton Collection; see Vol. I. p. 17). 4 vols. Naples, 1791–95, fol. Re-edited by S. Reinach, *Répertoire,* vol. ii., 1900. About 100 plates were engraved for a fifth volume, never published.
TREU (W.). *Griechische Thongefässe in Statuetten- und Büstenformen.* Berlin, 1875, 4to. (*35tes Winckelmannsfestprogr.*)
TYSZKIEWICZ (COUNT M.). See Froehner.

URLICHS (C. L. VON). *Der Vasenmaler Brygos und die ruland'sche Münzsammlung.* Würzburg, 1875, fol.
—— *Beiträge zur Kunstgeschichte.* Leipzig, 1884, 8vo.
See also Würzburg.
USSING (J.). *De nominibus vasorum graecorum disputatio.* Copenhagen, 1844.

Vienna. Die Sammlung antiker Vasen und Terracotten im k. k. Oesterreichischen Museum für Kunst und Industrie, by K. MASNER. Vienna, 1892. With plates.
VOGEL (K. J.). *Scenen euripideischer Tragödien in griechischen Vasengemälden.* Leipzig, 1886.
Vorlegeblätter für archäologische Übungen. Vienna, 1869–91, fol. Plates without text. Series i.–viii. 1869–75, *ed.* A. Conze (chiefly R.F. kylikes, by Euphronios, Hieron, Duris). Series A–E, 1879–86, *ed.* O. Benndorf (chiefly R.F. kylikes). Third series, 1888–91 (3 vols.), *ed.* Benndorf and others (chiefly signed B.F. vases). (*Wiener Vorl.*)

WALLIS (H.). *Pictures from Greek Vases. The White Athenian lekythi.* London, 1896.
WALTERS (H. B.). See British Museum.
WATZINGER (C.). *De vasculis pictis tarentinis capita selecta.* Darmstadt, 1899, 8vo.

WELCKER (F. G.). *Alte Denkmäler.* 5 vols. and atlas. Göttingen, 1849-64.
WERNICKE (K.). *Die griechischen Vasen mit Lieblingsnamen.* Berlin, 1890.
—— and GRAEF (B.). *Denkmäler der antiken Kunst.* Leipzig, 1899, etc. In progress. A new edition of Müller and Wieseler's well-known work. Text and atlas.
WESTROPP (H. M.). *Epochs of painted vases, an introduction to their study.* London, 1856.
WILISCH (E. G.). *Die altkorinthische Thonindustrie.* Leipzig, 1892.
WINKLER (A.). *De inferorum in vasis Italiae inferioris repraesentationibus.* Breslau, 1888, 8vo.
WINNEFELD (H.). See Karlsruhe.
WINTER (F.). *Die jüngeren attischen Vasen* und ihr Verhaltniss zur grossen Kunst. Berlin, 1885.
WITTE (J. J. A. M. DE, BARON). *Description des antiquités et objects d'art qui composent le cabinet de feu M. E. Durand.* Paris, 1836, 8vo.
—— *Description d'une collection de vases peints et bronzes antiques* provenant des fouilles de l'Étrurie. Paris, 1837, 8vo. [Another edition, 1857.]
—— *Noms des fabricants et dessinateurs de vases peints.* Paris, 1848, 8vo.
—— *Études sur les vases peints.* Paris, 1865, 8vo. (Extract from the *Gazette des Beaux-Arts.*)
—— *Description des collections d'antiquités conservées à l'Hôtel Lambert* (the Czartoryski collection). Paris, 1886, 4to. (*Coll. à l'Hôtel Lambert.*)
See also Lenormant.
Würzburg. Verzeichniss der Antikensammlung der Universität Würzburg, by C. L. VON URLICHS. 1865-72, 8vo.

ZANNONI (A.). *Gli Scavi della Certosa di Bologna.* 2 vols., text and plates. Bologna, 1876, fol. (An account of excavations at Bologna; many illustrations of tombs and Greek vases.)

PART III

TERRACOTTAS

Athens. See Martha.
Berlin Museum. Ausgewählte griechische Terrakotten im Antiquarium des königliches Museum zu Berlin, herausgegeben von der Generalverwaltung. Berlin, 1903. See also Panofka.
BLÜMNER (H.). *Technologie und Terminologie.* See above, p. xxi. Vol. ii. deals with method of working in clay (Thonplastik, p. 113 ff.).
BORRMANN (R.). *Die Keramik in der Baukunst.* Durm's *Handbuch der Architektur,* part i. vol. 4. Stuttgart, 1897. On the use of terracotta in classical architecture. See also Dörpfeld.
British Museum. Terracotta Sarcophagi, by A. S. Murray. London, 1898. See above, p. xxii.
—— *Catalogue of the Terracottas in the British Museum,* by H. B. Walters. London, 1903.
See also Combe.

CAMPANA (G. P.). *Antiche opere in plastica.* Rome, 1842-52, fol. Text incomplete; plates of architectural terracottas of the Roman period.

COMBE (TAYLOR). *A description of the collection of ancient Terracottas in the British Museum.* London, 1810. Describes the Towneley figures and mural reliefs.

DAREMBERG (C.), SAGLIO (E.), and POTTIER (E.). *Dictionnaire des Antiquités.* See above, p. xxiii. The article *Figlinum* in vol. ii. will be found useful.

DÖRPFELD (W.), GRAEBER (F.), BORRMANN (R.), and SIEBOLD (K.). *Über die Verwendung von Terrakotten* am Geison und Dache in griechischen Bauwerke. (*41tes Winckelmannsfestprogr.*) Berlin, 1881. (On terracotta in architecture.)

FURTWAENGLER (A.). *Collection Sabouroff.* See above, p. xxiv. Vol. ii. contains plates of Tanagra figures, with useful text to each.

HEUZEY (L.). *Les Figurines antiques de terre cuite du Musée du Louvre.* Paris, 1883, 4to. Plates, with brief text.

—— *Catalogue des figurines antiques de terre cuite du Musée du Louvre.* Vol. i. Paris, 1891. Deals with archaic terracottas (Rhodes and Cyprus). No more published.

HUISH (M. B.). *Greek Terracotta Statuettes,* their origin, evolution, and uses. London, 1900. (The plates include some doubtful specimens.)

HUTTON (MISS C. A.). *Greek Terracotta Statuettes.* (*Portfolio* monograph, No. 49.) London, 1899. An excellent *résumé* of the subject, with good illustrations.

KEKULÉ (R., now KEKULE VON STRADONITZ). *Griechische Thonfiguren aus Tanagra.* Stuttgart, 1878, fol.

—— *Die antiken Terracotten,* im Auftrag des archäologischen Institutes des deutschen Reichs, herausgegeben von R. K. Stuttgart, 1880, etc., fol. In progress.

Vol. i. *Terracotten von Pompeii,* by A. VON ROHDEN. 1880. Chiefly architectural.

Vol. ii. *Terracotten von Sicilien,* by R. KEKULÉ. 1884.

Vol. iii. *Typen der griechischen Terrakotten,* by F. WINTER. 1903. In two parts. A *Corpus* of all known types of terracotta statuettes, with numerous illustrations and other useful information.

MARTHA (J.). *Catalogue des Figurines en terre cuite du Musée de la Société Archéologique d'Athènes.* Paris, 1880, 8vo. (Bibliothèque des Écoles françaises, Fasc. 16.)

MINERVINI (G.). *Terre cotte del Museo Campano.* Vol. i. Naples, 1880. Illustrations of architectural terracottas.

PANOFKA (T.). *Terracotten des königlichen Museums zu Berlin.* Berlin, 1842, 4to.

PARIS (P.). *Élatée,* la ville, le Temple d'Athéna Cranaia. Paris, 1892. (Bibliothèque des Écoles françaises, Fasc. 60.) Contains some useful information on the subject.

POTTIER (E.). *Les Statuettes de Terre Cuite dans l'Antiquité.* Paris, 1890. (Bibliothèque des Merveilles.

POTTIER (E.) and REINACH (S.). *La Nécropole de Myrina.* 2 vols., text and plates. Paris, 1887.

ROHDEN (H. VON). See Kekulé.

SCHÖNE (R.). *Griechische Reliefs aus athenischen Sammlungen*, herausgegeben von R. S. Leipzig, 1872, fol. Illustration and discussion of the "Melian" reliefs (see pls. 30–34).

WINTER (F.). See Kekulé.

PART IV

ROMAN POTTERY

ARTIS (E. T.). *The Durobrivae of Antoninus* identified and illustrated. London, 1828, fol. Plates only; for accompanying text (by C. Roach-Smith) see *Journ. of Brit. Arch. Assoc.* i. p. 1 ff. Deals with pottery and kilns of Castor and neighbourhood.

BLANCHET (A.). *Mélanges d'Archéologie gallo-romaine*, ii. Paris, 1902, 8vo. (Lists of potteries in Gaul on p. 90 ff.)

BLÜMNER (H.). *Technologie und Terminologie*, etc. See above, p. xxi.

BRONGNIART (A.). *Traité de la Céramique.* See above, p. xxii.

BUCKMAN (J.) and NEWMARCH (C. H.). *Illustrations of the remains of Roman Art in Cirencester, the ancient Corinium.* London and Cirencester, 1850, 4to. (Now somewhat out of date.)

CAUMONT (A. DE). *Cours d'antiquités monumentales*; histoire de l'art dans l'Ouest de la France. 6 vols. Paris and Caen, 1830-41, 8vo, with atlas in oblong 4to.

CHOISY (A.). *L'Art de Bâtir chez les Romains.* Paris, 1873, 4to. (For the use of bricks and tiles.)

Corpus Inscriptionum Latinarum. Berlin, 1863, etc., fol. In progress. The portions of the published volumes giving the inscriptions on vases, tiles, and lamps, under the heading *Instrumentum Domesticum*, are invaluable, especially vol. xv. (by H. Dressel) relating to Rome. (*C.I.L.*)

DÉCHELETTE (J.). *Les Vases céramiques ornés de la Gaule romaine* (Narbonnaise, Aquitaine, et Lyonnaise). 2 vols. Paris, 1904, 4to. An invaluable survey of the pottery of Central and Southern Gaul, with much new material. (Déchelette.)

FABRONI (A.). *Storia degli antichi vasi fittili aretini.* Arezzo, 1841, 8vo. (On the Arretine wares.)

Guildhall Museum. See London.

HÖLDER (O.). *Formen der römische Thongefässe, diesseits und jenseits der Alpen.* Stuttgart, 1897, 8vo.

KOENEN (K.). *Gefässkunde der vorrömischen, römischen, und frankischen Zeit in den Rheinlanden.* Bonn, 1895, 8vo.

London (Guildhall Museum). *Catalogue of the Collection of London Antiquities* in the Guildhall Museum. London, 1903, 8vo.

—— (Museum of Practical Geology). *Handbook to the collection of British Pottery and Porcelain* in the Museum. London, 1893, 8vo.

MARINI (G.). *Iscrizioni antiche doliari*, edited by G. B. de Rossi and H. Dressel. Rome, 1884, 4to.

MARQUARDT (J.). *Handbuch der römischen Alterthümer* (with T. MOMMSEN). Bd. vii., Privatalterthümer. Leipzig, 1879-82, 8vo. See p. 616 ff. for Roman pottery.

MAZARD (H. A.). *De la connaissance par les anciens des glaçures plombifères*. Paris, 1879, 8vo. (On the enamelled Roman wares described in Vol. I. p. 129.)

MIDDLETON (J. H.). *The Remains of Ancient Rome*. 2 vols. London, 1892, 8vo. (On the use of bricks and tiles at Rome.)

PELICQUE (A. E.). *Étude de Céramique arverno-romaine*. Caen, 1887, 8vo. (On the potteries of Lezoux.)

ROACH-SMITH (C.). *Collectanea Antiqua*; etchings and notices of ancient remains, etc. 7 vols. London, 1848–80, 8vo. Useful for records of discoveries of Roman remains in Gaul and Britain.

—— *Illustrations of Roman London*. London, 1859, 4to.

STEINER (J. W. C.). *Codex Inscriptionum Romanarum Danubii et Rheni*. 4 vols. Darmstadt, etc., 1851–61, 8vo. Contains many inscriptions on pottery and tiles not as yet published in the *C.I.L.*

Victoria County History of England, ed. by W. PAGE, etc. In progress. London, 1900, etc. Articles in the first volume of each separate county history, by F. HAVERFIELD, dealing with all known Roman remains. Those of Northants and Hampshire are especially useful and complete.

WRIGHT (T.). *The Celt, the Roman, and the Saxon*. Fourth edn., 1885. Still useful as a summary of Roman Britain, though out of date and inaccurate in many particulars.

Reference should also be made to the *Bonner Jahrbücher* (see above, p. xix), especially to the treatise by Dragendorff in vol. xcvi., and for German pottery to Von Hefner's article in *Oberbayrische Archiv für vaterlandische Geschichte*, xxii. (1863), p. 1 ff.

For Bibliography of Roman Lamps, see heading to Chapter XX.

NOTE ON ABBREVIATIONS USED IN THIS WORK

B.F. = Black-figured vases.

R.F. = Red-figured vases.

B.M. = British Museum.

Reinach = Reinach's *Répertoire des Vases* (see Bibliography).

In the cases where particular vases are cited, as in Chapters XII.–XV., the name of the museum is given with the catalogue number attached, as B.M. B 1; Louvre G 2; Berlin 2000, etc. The vases in the Vatican Museum at Rome are quoted as Helbig, 1, 2, 3, etc. (see Bibliography, under *Rome*).

All other abbreviations will be found in the Bibliography.

PART I

GREEK POTTERY IN GENERAL

CHAPTER I

INTRODUCTORY

Importance of study of ancient monuments—Value of pottery as evidence of early civilisation—Invention of the art—Use of brick in Babylonia—The potter's wheel—Enamel and glazes—Earliest Greek pottery—Use of study of vases—Ethnological, historical, mythological, and artistic aspects—Earliest writings on the subject—The "Etruscan" theory—History of the study of Greek vases—Artistic, epexegetic, and historical methods—The vase-collections of Europe and their history—List of existing collections.

THE present age is above all an age of Discovery. The thirst for knowledge manifests itself in all directions—theological, scientific, geographical, historical, and antiquarian. The handiwork of Nature and of Man alike are called upon to yield up their secrets to satisfy the universal demand which has arisen from the spread of education and the ever-increasing desire for culture which is one of the characteristics of the present day. And though, perhaps, the science of Archaeology does not command as many adherents as other branches of learning, there is still a very general desire to enquire into the records of the past, to learn what we can of the methods of our forefathers, and to trace the influence of their writings or other evidences of their existence on succeeding ages.

To many of us what is known as a classical education seems perhaps in these utilitarian times somewhat antiquated and

unnecessary, but at the same time "the glory that was Greece and the grandeur that was Rome" have not lost their interest for us, and can awaken responsive chords in most of our hearts. Nor can we ever be quite forgetful of the debt that we owe to those nations in almost every branch of human learning and industry. To take the most patent instance of all, that of our language, it is not too much to say that nearly every word is either directly derived from a classical source or can be shown to have etymological affinities with either of the two ancient tongues. Nor is it necessary to pursue illustrations further. We need only point to the evidences of classical influence on modern literature, modern philosophy, and modern political and social institutions, to indicate how our civilisation is permeated and saturated with the results of ancient ideas and thoughts. The man of science has recourse to Greek or Latin for his nomenclature; the scholar employs Latin as the most appropriate vehicle for criticism; and modern architecture was for a long time only a revival (whether successful or not) of the principles and achievements of the classical genius.

Now, those who would pursue the study of a nation's history cannot be content with the mere perusal of such literary records as it may have left behind. It needs brief consideration to realise that this leaves us equipped with very little real knowledge of an ancient race, inasmuch as the range of literature is necessarily limited, and deals with only a few sides of the national character: its military history, its political constitution, or its intellectual and philosophical bent—in short, its external and public life alone. He who would thoroughly investigate the history of a nation instinctively desires something more; he will seek to gain a comprehensive acquaintance with its social life, its religious beliefs, its artistic and intellectual attainments, and generally to estimate the extent of its culture and civilisation. But to do this it is necessary not only to be thoroughly conversant with its literary and historical records, but to turn attention also to its *monuments*. It need hardly be said that the word "monument" is here used in the quasi-technical sense current among archaeologists (witness the German use of the word *Denkmäler*), and that it must bear here a much wider

signification than is generally accorded to it nowadays. It may, in fact, be applied to any object which has come down to us as a memorial and evidence of a nation's productive capacity or as an illustration of its social or political life. The student of antiquity can adopt no better motto than the familiar line of Terence :

Homo sum ; humani nihil a me alienum puto.

For the very humblest product of the human brain or hand, a potsherd or a few letters scratched on a stone, may throw the most instructive light on the history of a race.

In no instance is this better seen than in the case of Assyria, where almost all that we know of that great and wonderful people is derived from the cuneiform inscriptions scratched on tablets of baked clay. Or, again, we may cite the stone and bronze implements of the primitive peoples of Europe as another instance where "the weak and base things of the world and the things that are despised" have thrown floods of light on the condition of things in a period about which we should have been completely in the dark so long as we looked only to literary records for our information. Nothing is so common that it may be overlooked, and we may learn more from a humble implement in daily use than from the finest product of a poetic or artistic intellect, if we are really desirous of obtaining an intimate acquaintance with the domestic life of a people.

Among the simplest yet most necessary adjuncts of a developing civilisation Pottery may be recognised as one of the most universal. The very earliest and rudest remains of any people generally take the form of coarse and common pots, in which they cooked their food or consumed their beverages. And the fact that such vast quantities of pottery from all ancient civilisations have been preserved to us is due partly to its comparatively imperishable nature, partly to the absence of any intrinsic value which saved it from falling a prey to the ravages of fire, human greed, or other causes which have destroyed more precious monuments, such as gold ornaments, paintings, and statues of marble or bronze. Moreover, it is always in the pottery

that we perceive the first indications of whatever artistic instinct a race possesses, clay being a material so easy to decorate and so readily lending itself to plastic treatment for the creation of new forms or development from simple to elaborate shapes.

To trace the history of the art of working in clay, from its rise amongst the oldest nations of antiquity to the period of the decline of the Roman Empire, is the object of the present work. The subject resolves itself into two great divisions, which have engaged the attention of two distinct classes of enquirers : namely, the technical or practical part, comprising all the details of material, manipulation, and processes ; and, secondly, the historical portion, which embraces not only the history of the art itself, and the application of ancient literature to its elucidation, but also an account of the light thrown by monuments in clay on the history of mankind. Such an investigation is therefore neither trifling in character nor deficient in valuable results.

It is impossible to determine when the manufacture of pottery was invented. Clay is a material so generally diffused, and its plastic nature is so easily discovered, that the art of working it does not exceed the intelligence of the rudest savage. Even the most primitive graves of Europe and Western Asia contain specimens of pottery, rude and elementary indeed, but in sufficient quantities to show that it was at all times reckoned among the indispensable adjuncts of daily life.

It is said that the very earliest specimens of pottery, hand-made and almost shapeless, have been discovered in the cave-dwellings of Palaeolithic Man, such as the Höhlefels cave near Ulm, and that of Nabrigas, near Toulouse ; and pottery has also been found in the "kitchen-middens" of Denmark, which belong to this period. Such relics are, however, so rude and fragmentary, and so much doubt has been cast on the circumstances of their discovery, that it is better to be content with the evidence afforded by the Neolithic Age, of which perhaps the best authenticated is the predynastic pottery of Egypt.[1]

Abundant specimens of pottery have been found in long

[1] *B.M. Guide to First and Second Egyptian Rooms* (1904), p. 22 ; for early Neolithic pottery from Ireland see *Guide to Antiqs. of Stone Age*, p. 84.

barrows in all parts of Western Europe; these are supposed to be the burial-places of the early dolichocephalic races, now represented by the Finns and Lapps, which preceded the Aryan immigration. The chief characteristic of this pottery is the almost entire absence of ornamentation. Neolithic man appears to have been far less endowed with the artistic instinct than his palaeolithic predecessor. Where ornament does occur, it appears to have a quite fortuitous origin: for instance, a kind of rope-pattern that appears on the earliest pottery of Britain and Germany, and also in America, owes its origin to the practice of moulding the clay in a kind of basket of bark or thread. It is also possible that cords of some kind were used for carrying the pots; and this reminds us of another characteristic of the earliest pottery, which, indeed, lasts down to the Bronze Age—namely, the absence of handles.

The baking of clay, so as to produce an indestructible and tenacious substance, was probably also the result of accident rather than design. This was pointed out as long ago as the middle of the eighteenth century by M. Goguet. In most countries the condition of the atmosphere precludes the survival of sun-dried clay for any length of time; moreover, such a material was more suitable for architecture (as we shall see later) than for vessels destined to hold liquids. Thus it is that Egypt, Assyria, and Babylonia alone have transmitted to posterity the early efforts of workers in sun-dried clay.

To return to the new invention. The savage conceivably found that the calabash or gourd in which he boiled the water for his simple culinary needs was liable to be damaged by the action of fire; and it required no very advanced mental process to smear the exterior of the vessel with some such substance as clay in order to protect it. As he found that the surface of the clay was thereby rendered hard and impervious, his next step would naturally be to dispense with the calabash and mould the clay into a similar form. These two simple qualities of clay, its plastic nature and its susceptibility to the action of fire, are the two elements which form the basis of the whole development of the potter's art.

From the necessity for symmetrical buildings arose the

invention of the brick, which must have superseded the rude plastering of the hut with clay, to protect it against the sun or storm. In the history of the Semitic nations the brick appears among the earliest inventions, and its use can be traced with various modifications, from the building of the Tower of Babel to the present day. It is essential that bricks should be symmetrical, and their form is generally rectangular. Their geometrical shape affords us a clue to ancient units of measurement, and the various inscriptions with which they have been stamped have elevated them to the dignity of historical monuments. Thus the bricks of Egypt not only afford testimony, by their composition of straw and clay, that the writer of Exodus was acquainted with that country, but also, by the hieroglyphs impressed upon them, transmit the names of a series of kings, and testify to the existence of edifices, all knowledge of which, except for these relics, would have utterly perished. Those of Assyria and Babylon, in addition to the same information, have, by their cuneiform inscriptions, which mention the locality of the edifices for which they were made, afforded the means of tracing the sites of ancient Mesopotamia and Assyria with an accuracy unattainable by any other means. The Roman bricks have also borne their testimony to history. A large number of them present a series of the names of consuls of imperial Rome; while others show that the proud nobility of the eternal city partly derived their revenues from the kilns of their Campanian and Sabine estates.

From the next step in the progress of the manufacture—namely, that of modelling in clay the forms of the physical world—arose the plastic art. Delicate as is the touch of the finger, which the clay seems to obey, almost as if comprehending the intention of the potter's mind, yet certain forms and ornaments which require a finer point than the nail gave rise to the use of pieces of horn, wood, and metal, and thus contributed to the invention of tools. But modelling in clay was soon superseded by sculpture in stone and metal, and at length only answered two subordinate ends: that of enabling the sculptor to elaborate his first conceptions in a material which could be modified at will; and that of readily producing works

of a small and inexpensive form, for some transitory purpose. The invention of the mould carried this last application to perfection, and the terracottas of antiquity were as numerous and as cheap as the plaster casts now sold by itinerants.

The materials used for writing have varied in different ages and nations. Stone and bronze, linen and papyrus, wax and parchment, have all been used. But the Assyrians and Babylonians employed for their public archives, their astronomical computations, their religious dedications, their historical annals, and even for title-deeds and bills of exchange, tablets, cylinders, and hexagonal prisms of terracotta. Some of these cylinders, still extant, contain the history of the Assyrian monarchs Tiglath-pileser and Assurbanipal, and the campaign of Sennacherib against the kingdom of Judah; and others, excavated from the Birs Nimrud, give a detailed account of the dedication of the great temple by Nebuchadnezzar to the seven planets. To this indestructible material, and to the happy idea of employing it in this manner, the present age is indebted for a detailed history of the Assyrian monarchy; whilst the decades of Livy, the plays of Menander, and the lays of Anakreon, confided to a more perishable material, have either wholly or partly disappeared.

The application of clay to the making of vases was made effective by the invention of the potter's wheel. Before the introduction of the wheel only vessels fashioned by the hand, and of rude unsymmetrical shape, could have been made. But the application of a circular table or lathe, laid horizontally and revolving on a central pivot, on which the clay was placed, and to which it adhered, was in its day a truly wonderful advance. As the wheel spun round, all combinations of oval, spherical, and cylindrical forms could be produced, and the vases not only became symmetrical in their proportions, but truthfully reproduced the potter's conception. The invention of the wheel has been ascribed to all the great nations of antiquity. It is represented in full activity in the Egyptian sculptures; it is mentioned in the Scriptures, and was certainly in use at an early period in Assyria. The Greeks and Romans attributed it to a Scythian philosopher, and to the states of

Athens, Corinth, and Sikyon, the first two of which were great rivals in the ceramic art. But, as will be explained hereafter, it was introduced at a very early stage in the history of civilisation upon Greek soil (see p. 206).

Although none of the very ancient kilns have survived the destructive influence of time, yet among all the great nations baked earthenware is of the highest antiquity. In Egypt, in the tombs of the first dynasties, vases and other remains of baked earthenware are abundantly found; and in Assyria and Babylon even the oldest bricks and tablets have passed through the furnace. The oldest remains of Hellenic pottery in all cases owe their preservation to their having been subjected to the action of fire. To this process, as to the consummation of the art, the other processes of preparing, levigating, kneading, drying, and moulding the clay were necessarily ancillary.

The desire of rendering terracotta less porous, and of producing vases capable of retaining liquids, gave rise to the covering of it with a vitreous enamel or glaze. The invention of glass was attributed by the ancients to the Phoenicians; but opaque glass or enamels, as old as the Eighteenth Dynasty, and enamelled objects as early as the Fourth, have been found in Egypt. The employment of copper to produce a brilliant blue-coloured enamel was very early both in Babylonia and Assyria; but the use of tin for a white enamel, as discovered in the enamelled bricks and vases of Babylonia and Assyria, anticipated by many centuries the rediscovery of that process in Europe in the fifteenth century, and shows the early application of metallic oxides. This invention apparently remained for many centuries a secret among the Eastern nations only, enamelled terracotta and glass forming articles of commercial export from Egypt and Phoenicia to every part of the Mediterranean. Among the Egyptians and Assyrians enamelling was used more frequently than glazing; hence they used a kind of faience consisting of a loose frit or body, to which an enamel adheres after only a slight fusion. After the fall of the Roman Empire, the art of enamelling terracotta disappeared except amongst the Arab and Moorish races, who had retained a traditionary knowledge of the process. The

application of a transparent vitreous coating, or glaze, to the entire surface, like the varnish of a picture, is also to be referred to a high antiquity. Originally intended to improve the utility of the vase, it was used by Greeks and Romans with a keen sense of the decorative effects that could be derived from its use.

In Greece, although nearly all traces of the Stone Age are wanting, and little pottery has been found which can be referred to that period,[1] yet the earliest existing remains of civilisation are, as we shall see later, in the form of pottery; and Greece is no exception to the general rule. But the important difference between the pottery of Asia and Egypt and that of Greece is that only in the latter was there any development due to artistic feeling. Of the Greek it may be said, as of the medieval craftsman, *nihil tetigit quod non ornavit.* In the commonest vessel or implement in every-day use we see almost from the first the workings of this artistic instinct, tending to exalt any and every object above the mere level of utilitarianism, and to make it, in addition to its primary purpose of usefulness, "a thing of beauty and a joy for ever." Feeble and rude it may be at first, and hampered by imperfect knowledge of technique or capacity for expression—but still the instinct is there.

There is indeed at first but little in Greek pottery to differentiate it from that of other nations possessing any decorative instincts. As M. Pottier[2] has pointed out, there is a universal law which manifests itself in nascent art all over the world: "More than once men have remarked the extraordinary resemblance which the linear decoration of Peruvian, Mexican, and Kabyle vases bears to the ornamentation of the most ancient Greek pottery. There is no possibility of contact between these different peoples, separated by enormous distances of time and space. If they have this common resemblance at the outset of their artistic evolution, it is because all must pass through a certain phase, resulting in some measure from the structure of the human brain. Even so at the present day

[1] Remains of Neolithic pottery have recently been found in Crete (*J.H.S.* xxiii. p. 158) and in the Cyclades.

[2] *Cat. des Vases Antiques du Louvre*, i. p. 18.

there are savages in Polynesia who, by means of a point applied to the soft clay, produce patterns exactly similar to those found on Greek or Cypriote pottery of fifteen or twenty centuries before our era." Or to take a later stage of development, the compositions of vase-paintings of the sixth century B.C. are governed by the same immutable laws of convention and principles of symmetry as the carvings of the Middle Ages. Instances might be multiplied *ad infinitum*; but the principle is universal.

A question that may be well asked by any visitor to a great museum is, What is the use of the study of Greek vases? The answer is, that no remains of Greek art have come down to us in such large quantities, except perhaps coins, and certainly none cover so long a period. Portraying as they do both the objective and subjective side of Greek life, they form perhaps the best introduction to the study of Greek archaeology in general. In no other class of monuments are the daily life and religious beliefs of the Greeks so vividly presented as in the painted vases. Their value to the modern student may be treated under four separate heads: (1) Ethnological; (2) Historical; (3) Mythological; (4) Artistic.

(1) **Ethnological.**—On this subject we have already touched in this chapter, pointing out that pottery has an exceptional importance, not only as one of the most universal and instructive illustrations of the early developments of a single nation, but for purposes of comparison of one nation with another. Sculpture, painting, architecture, and other arts have a more limited range, and tell us nothing of domestic life or social progress; but the common utensils of daily life, like flint implements or bronze weapons, are of incalculable value for the light that they throw on the subject, and the evidence which, in the absence of historical data, they afford. We have also called attention to the prevalence of universal laws acting on the development of the early art of all nations.

Thus in dealing with the early history of Greece, before historical records are available, we are enabled by the pottery-finds to trace the extent of the Mycenaean civilisation, from

Egypt to the Western Mediterranean; we may see Homeric customs reflected in the vases of the Geometrical period from Athens; and in the decorative patterns of the succeeding period we may see signs of close intercourse with Assyria and a knowledge of Oriental textile fabrics. The finds in Rhodes, Cyprus, and the islands off Asia Minor also testify to a continued and extensive intercourse between the mainland of Greece and the Eastern Aegean.

(2) **Historical.**—The historical value of Greek vases rests partly on the external, partly on the internal evidence that they afford. In the former aspect those of historic times, like those of the primitive age, confirm, if they do not actually supplement, literary records of Greek history. Thus the numerous importations of vases from Corinth to Sicily and Italy in the seventh century B.C. show the maritime importance of that city and the extent of her commercial relations; while in the succeeding century the commercial rivalry between her and Athens is indicated by the appearance of large numbers of Attic fabrics in the tombs of Italy along with the Corinthian; the final supremacy of Athens by the gradual disappearance of the Corinthian wares, and the consequent monopoly enjoyed by the rival state. The fact that after the middle of the fifth century the red-figured Attic vases are seldom found in Sicilian or Italian tombs shows clearly the blow dealt at Athenian commerce by the Peloponnesian War, and the enforced cessation of exports to the west, owing to the hostility of Sicily and the crippling of Athenian navies; and the gradual growth of local fabrics shows that the colonists of Magna Graecia at that time began themselves to supply local demands. Instances might be multiplied.

But the internal evidence of the vases is of even greater value, not only for the political, but still more for the social history of Greece. By the application of painting to vases the Greeks made them something more than mere articles of commercial value or daily use. Besides the light they throw on the Greek schools of painting, they have become an inexhaustible source for illustrating the manners, customs, and literature of Greece. A Greek vase-painting—to quote M. Pottier—

is not only a work of art, but also an historical document. Even when all artistic qualities are lacking, and the vase at first sight is liable to be regarded as a worthless and uninteresting production, a closer inspection will often reveal some small point which throws light on a question of mythology, or of costume or armour. Or, again, an inscription painted or even scratched on a vase may be of surpassing philological or palaeographical importance. For instance, the earliest inscription known in the Attic alphabet is a *graffito* on a vase of the seventh century B.C. (see Chapter XVII.), which of itself would command no consideration; but this inscription is valuable not only as evidence for early forms of lettering, but from its subject-matter. It is true that it need not necessarily be contemporary with the vase itself, as it may have been scratched in after it was made, but this cannot detract from its importance or affect its chronological value.

Or, again, a fragment of a painted vase found at Athens bears the name of Xanthippos rudely scratched upon it; on the foot of another is that of Megakles (see below, p. 103). Both of these are undoubted instances of *ὄστρακα*, which were used for the banishment of these historical personages. They therefore provide a striking illustration of the institution of Ostracism, and bear out what we have said as to the importance of archaeological discoveries for the study of History. Historical or quasi-historical subjects are sometimes actually depicted on the vases, but this question must be reserved for fuller treatment in Part III., which deals with the subjects on vases in detail. In that section of the work we shall also deal with the relations of vase-paintings to ancient literature; and in the list of subjects taken from daily life (Chapter XV.) it will be seen what ample information is afforded on such points as the vocations and pastimes of men, the life of women, war and athletics, sport and education.

(3) **Mythological.**—On this head reference must again be made to the chapters on Subjects, as affording ample evidence of the importance of the vases not only for the elucidation of Greek mythology and legend, but also for religious cults and beliefs. One other point, however, is worth noting here.

Our knowledge of Greek mythology, if only derived from literary records, rests largely on the compilations of Roman or late writers, such as Ovid, Hyginus, and Apollodoros. It has been aptly pointed out by a recent writer[1] that in these authors we have mythology in a crystallised form, modified and systematised, and perhaps confused with Latin elements, and that our popular modern notions are mainly derived from these sources as they have been filtered down to us through the medium of Lemprière's Dictionary and similar works. But vase-paintings are more or less original and contemporary documents. Granted that it is possible to run to the opposite extreme and accept art traditions to the utter neglect of the literary tradition as derived from Homer and the Tragedians, the fact still remains that for *suggestions*, and for raising problems that could never have arisen through a literary medium, the evidence of vases is of inestimable value.

In regard to Greek religious beliefs, it should be borne in mind that with the Greeks art was the language by which they expressed their ideas of the gods. It was thus largely due to their religion that they attained supremacy in the plastic art, and their absolute freedom of treatment of their religious beliefs almost eliminated the hieratic and conventional character of Oriental art from their own, with its infinite variety of conceptions. The vase-paintings, almost more than any other class of monuments, reveal the universal religious sentiment which pervaded their life—the δεισιδαιμονία which prevailed even in Romanised Athens. Thus the vases constitute a pictorial commentary on all aspects of Greek life and thought.[2]

(4) **Artistic.**—(*a*) *Form.* In the grace of their artistic forms the Greeks have excelled all nations, either past or present. The beauty and simplicity of the shapes of their vases have caused them to be taken as models; but as every civilised

[1] Miss Harrison, *Mythology and Monuments of Athens*, preface, p. ii. The Introduction to this work contains some excellent examples of the modern method of using vase-paintings to elucidate mythology.

[2] For the use of vase-paintings in illustration of Greek religious beliefs and customs, reference may be made to Miss Harrison's *Prolegomena to Greek Religion* (Cambridge Press, 1903), containing many interesting interpretations of scenes on the vases which may bear on the subject.

people has received from other sources forms sanctioned by time, and as many of the Greek forms cannot be adapted to the requirements of modern use, they have not been extensively imitated. Yet to every eye familiar with works of art of the higher order their beauty is fully apparent.

(*b*) *Decoration.* It is at first difficult to realise how little we actually know of Greek painting. Our modern museums are so full of specimens of Greek sculpture, either originals or ancient copies of masterpieces, that we feel it possible to obtain an adequate idea of the genius of Pheidias or Praxiteles at first-hand, so to speak. But ancient literature clearly shows that painting was held by the Greeks in equally high estimation with sculpture, if not even higher. Consult the writings of the elder Pliny on ancient art. A considerable space is there devoted to the account of the great painters Zeuxis, Apelles, and Parrhasios, while Pheidias is barely mentioned, and the account of Praxiteles' works is far from complete. Yet we look in vain through most modern collections for any specimen of Greek painting on fresco or panel.

This is, of course, due to the perishable character of pictures and the destruction of the buildings on the walls of which the great frescoes were preserved. But the fact remains that we have to look in other directions for the evidence we require to find. We have here and there a painted Greek tombstone, a Pompeian fresco, or the decoration of an Etruscan sepulchre to give us a hint; but while the first-named are far too inconsiderable in number to give us any idea of the art of their time, the two latter are merely products of an imitative art, giving but a faint echo of the originals.

Now, in the vases we have, as noted in regard to mythology, contemporary evidence. It must never be forgotten that vase-painting is essentially a decorative art; but, as we shall see later in tracing its historical development, there is always a tendency to ignore the essential subserviency of design to use, and to give the decoration a more pictorial character. Many of the late vases are, in fact, pictures on terracotta. Again, there is a class of fifth-century vases with polychrome paintings on white ground which actually recall the method we know

to have been employed by the great master of that century, Polygnotos. And with regard to the late vases we shall hope to show in a future chapter that, like the Pompeian paintings, they often reflect the spirit, if not the exact likeness, of some well-known painting of which we have record.

Many instances might be given of vase-paintings which reflect, or assist our knowledge of, the products of the higher arts. Even as early as the end of the sixth century the group of the Tyrant-slayers, the creation of Antenor and of Kritios and Nesiotes, is found repeated on a black-figured vase[1]; and the early *poros* pediments from the Athenian Acropolis find an interesting parallel in an early Attic vase of about the same date.[2] So again in Ionia, the style of the sculptures of the archaic temple at Ephesos finds its reflection in some of the local sixth-century vase-fabrics.[3] Coming to the fifth century, the heads in Euphronios' paintings may be compared with some of the Attic heads in marble, like that of the ephebos from the Acropolis.[4] Combats of Greeks with Amazons and Centaurs on later R.F. vases often seem to suggest a comparison with the friezes of Phigaleia and Olympia; a figure from the balustrade of the Nike temple is almost reproduced on a R.F. vase,[5] and the riding youths of the Parthenon frieze on some of the white Athenian lekythi; and the Kertch vase with the contest of Athena and Poseidon (Plate L.) is of special interest as an almost contemporary reproduction of the Parthenon west pediment. In painting, again, the later R.F. vases in many instances reflect what we know of the style and composition of Polygnotos' paintings, and there are many instances on the vases of the subjects treated by him and Mikon.[6]

It is not necessary here to say more of the importance of a study of Greek vases on the several lines that we have pointed out. It is sufficient to say that specialists in all these branches

[1] See Chapter XIV., *ad fin.*

[2] *Ant. Denkm.* i. 57.

[3] Cf. for instance Berlin 2154 (Endt, *Ion. Vasenm.* p. 29).

[4] Collignon, *Hist. de la Sculpt. Grecque*, i. p. 362.

[5] Gerhard, *Auserl. Vasenb.* 81.

[6] As, for instance, the subjects of Odysseus and Philoktetes; Orestes slaying Aegisthos; the death of Polyxena; Theseus fetching the ring from Amphitrite. Cf. Huddilston, *Lessons from Greek Pottery*, p. 28.

of Archaeology instinctively turn to vases for the main source of their information.

The earliest date at which public attention was directed to the painted vases was the end of the seventeenth century. In those days, it need hardly be said, systematic excavation was a thing quite unknown, while archaeology as a science was non-existent. Beyond a few sculptures which had been handed down at Rome or elsewhere through many vicissitudes, cabinets of gems which had been preserved by cardinals and other dignitaries who employed them for signet-rings, chiefly for ecclesiastical purposes, and some collections of coins of the Renaissance period, there were no specimens of ancient art preserved. During the seventeenth century, however, the fashion arose of making voyages to Italy or Greece, and bringing back any spoils that might attract the notice of the traveller. In this way the collection of Arundel Marbles at Oxford was made, and the nucleus of many of the famous private collections of England formed. But the painted vases, which for the most part lay buried in tombs, escaped notice almost entirely—and, perhaps even where specimens were preserved, they attracted little notice—until with Winckelmann arose a gradual hankering after the possession of artistic treasures and the formation of collections of antiques.

The earliest allusion to be found to painted vases is in the works of La Chausse (Caussius),[1] and in the *Thesaurus* of Graevius,[2] while the oldest existing catalogue is that of the collection of the Elector of Brandenburg, compiled by L. Beger in 1696-1701.[3] Some few are illustrated in these works, while others were given later by Montfaucon,[4] Dempster,[5] Gori,[6] and Caylus.[7] Winckelmann published several vases in his *Histoire de l'Art* (1764) and *Monumenti Antichi* (1769), and the industrious Passeri in 1767-75 published, besides a supplement to Dempster, three volumes containing coloured engravings of vases in various collections.

[1] *Museum Romanum*, Rome, 1690, fol.
[2] *Thesaur. Antiq. Rom.* xii. 955.
[3] *Thesaur. regii Brandenb.* vol. iii.
[4] *Ant. Explic.* iii. pls. 71-77 (1719).
[5] *Etr. Regal.* 1723, fol.
[6] *Mus. Etr.* 1737-43.
[7] *Recueil*, 1752-67 (especially vols. i.-ii.).

Sir William Hamilton, who was for some time English Ambassador at Naples, formed there a considerable collection of Greek and Roman antiquities, mostly painted vases, which had been discovered in various tombs in Southern Italy and Etruria. All these he brought with him to England and sold to the newly instituted British Museum in 1767. A Frenchman named Hugues or D'Hancarville compiled a magnificent work in four volumes[1] illustrating the vases in this collection, with elaborate diagrams of the shapes; but the representations of the subjects are often marred by the imaginary ornamental borders in which they are framed, while the whole work, like others of the same period, is marked by a tendency to ignore all but the artistic interest, and instead of an accurate reproduction to aim merely at giving a pretty picture.

A second collection of vases belonging to Hamilton was mostly lost at sea, but a record of it has been preserved in Tischbein's work, *Vases d'Hamilton*,[2] in four volumes, which is more accurate and useful than that of D'Hancarville. It is believed that many of these vases are now in the Hope collection at Deepdene, which is unfortunately inaccessible to archaeologists.

The Hamilton collection formed, as we have said, the nucleus of the magnificent array of vases in the British Museum. Most of them, it is true, belong to the later period or decadence of vase-painting, and were not only found, but had also been manufactured, in Italy. Although the time for a scientific study and classification was not yet to be for some sixty years, the interest in the subject was decidedly on the increase, and many English noblemen and gentlemen were forming collections, as well as such foreigners as the Duc de Blacas, the Duc de Luynes, and M. Millin. It became the fashion to produce large folio works embodying the contents of these collections in series of coloured illustrations, and thus we have, besides those already mentioned, the imposing publications of Millin,[3]

[1] *Antiqs. Étr. Gr. et Rom., tirées du Cabinet de M. H.*, fol. 1766-67.

[2] 1791-1803. Plates for a fifth volume were prepared, but never regularly published (see Reinach, *Répertoire des Vases Peints*, ii. p. 334).

[3] *Peintures des Vases Antiques*, edited by M. Dubois-Maisonneuve, in two volumes, with Introduction (1808-10); now re-edited by S. Reinach (1891).

Millingen,[1] Laborde,[2] and others. On the same lines, but mostly of later date, are the publications of De Rossi,[3] Christie,[4] Moses,[5] Inghirami,[6] Lanzi,[7] Böttiger,[8] Micali,[9] Raoul-Rochette,[10] Stackelberg,[11] and the Duc de Luynes,[12] who published either their own vases, as De Luynes, or some well-known collection like that of the Duc de Blacas, or some particular class of vases: *e.g.* Micali, those found in Etruria; Raoul-Rochette and Inghirami, those illustrating Homer; and Stackelberg, those found in tombs in Greece Proper. Few of these, it will be seen, were published in England, where neither public patronage nor private enterprise were found prepared to rival the achievements of the Continent.

In most of these works the vases are styled "Etruscan" as a matter of course. Even nowadays it is a very common experience to hear vases spoken of as "Etruscan" or even as "Etruscan urns," as if every vase was used as a receptacle for the ashes of the dead. This error has lasted, with all the perseverance of a popular fallacy, for over a century, and cannot now be too strongly denounced. But at the beginning of the last century the Etruscan origin of painted vases was most strongly maintained by erudite scholars, chiefly Italians who desired to champion the credit of their own country, and the controversy raged with varying force till Greece was able to substantiate her own case by the numbers of vases that came forth from her tombs to proclaim their Hellenic origin.

The "Etruscan" theory was first promulgated by Montfaucon, Gori, Caylus, and Passeri, between 1719 and 1752; their arguments being based on the plausible ground that up till that

[1] *Vases Grecs*, Rome, 1813; *Vases de Coghill*, Rome, 1817; *Ancient Uned. Monuments*, London, 1822; the two former now re-edited by S. Reinach, 1891 and 1900.

[2] *Vases de Lamberg*, Paris, 1813-25; re-edited by S. Reinach, 1900.

[3] *Vasi de Blacas.* This was never actually published: see Reinach, *Répertoire*, ii. p. 383.

[4] *Disquisitions on the Painted Vases*, 1806.

[5] *Coll. of Antique Vases*, London, 1814.

[6] *Vasi Fittili*, 4 vols. 1833; *Mon. Etruschi* (1824), vol. v.; *Gal. Omerica*, 3 vols. 1831-36, etc.

[7] *De' vasi antichi dipinti*, 1806.

[8] *Gr. Vasengemälde*, 1797-1800.

[9] *Monumenti per servire alla storia degli ant. pop. ital.* 2nd edn. 1833; *Monumenti inediti*, 1844.

[10] *Mon. Inéd.* 1828.

[11] *Gräber der Hellenen*, Berlin, 1837.

[12] *Descr. de quelques vases peints*, 1840.

time the vases had been found almost exclusively in Etruria. So the term "Etruscan vase" passed into the languages of Europe, and has survived in spite of a century of refutation. But in 1763 Winckelmann, the father of scientific archaeology, conceived the idea that the spirit and character of the vase-paintings were wholly Greek; and he proposed to call them Italo-Greek or Graeco-Sicilian, indicating Magna Graecia as the true place of their manufacture. This was a step in the right direction, and he was supported later by Lanzi, Millin, Millingen, and others (1791—1813). A further attempt was made to define the particular places of their fabric, and Nola, Locri, and Agrigentum were suggested as the most important centres. Meanwhile, the discoveries of vases in Attica, at Corinth, and elsewhere in Greece, and subsequently the publication of Stackelberg's work, helped to confirm the position of Winckelmann's followers.

In 1828 came what M. Pottier terms "an objectionable revival of Etruscomania," with the extensive and marvellously fruitful excavations at Vulci under the direction of the Prince of Canino, Lucien Bonaparte, on whose estates most of the tombs were found. Several thousand vases were the yield of this site, mostly of the best periods of Greek art. This was a great epoch in the history of the study of Greek vases. A flood of fresh light was thrown on the subject by the mass of new material, and a whole new literature arose in consequence. Hitherto vases of the archaic and fine periods had only been known in isolated instances, and the bulk of the existing collections was formed of the florid vases of the Decadence; but now it became possible to fill up the gaps and trace the whole development of the art from the simplest specimens with decorative patterns or figures of animals down to the very last stages of painting.

These discoveries prompted Prince Lucien Bonaparte to revive the theory of Etruscan origin, in which he was supported by D'Amatis and De Fea. It is probable that all three were animated more by patriotic motives than by intellectual conviction. At any rate their arguments appealed but little to scholars, although not a few inclined to take a middle course,

and maintained that there existed, not only in Etruria but also in Southern Italy, various local centres of manufacture under Greek superintendence and in close connection with Athens and her influences. These ideas were upheld by Gerhard, Welcker, the Duc de Luynes, and Ch. Lenormant. But the preponderating arguments were to be found on the other side, from Kramer (1837), who attributed all vases but those of the Decadence to an Attic origin, O. Müller, who limited this to the finer examples from Vulci, and Raoul-Rochette, who pinned his faith to Sicily, to Otto Jahn,[1] who may be said to have founded the modern comparative study of Greek ceramics on its present basis (1854).

Jahn pronounced decisively for the Greek origin of all but the later fabrics, and his principles have been adopted by all succeeding archaeologists, with the exception of Brunn, and one or two of the latter's disciples, who have swung back to the Italian theory in some respects. Up to his time all had been in chaos, and each writer worked on his own particular line without regard to others, both as regards the origin of the vases and the subjects depicted thereon; but Jahn, in his epoch-making catalogue of the vases at Munich, was the first to make a serious and scientific attempt to reduce the chaos to order, not only by adopting a rational system of interpretation, but by systematising and reducing to one common denominator all previous contributions to knowledge.

We may say that the study of Greek vases has passed through three main stages: (1) Artistic; (2) Epexegetic; (3) Historical.

(1) **Artistic** (1690—1770).—In the first stage, as we have seen, the artistic merit of the vases and the aim of producing a pretty picture were alone regarded. Hence, too, arose the fashion of making copies of Greek vases, and many specimens were produced by Wedgwood,[2] bearing, however, no more than a superficial likeness to the originals.

(2) **Epexegetic** (1770—1854).—In the second stage it seems to have been suddenly discovered that the figures on the vases

[1] *Die Vasensammlung zu München*, Introduction.

[2] He gave the name of Etruria to the place in Staffordshire where he set up his pottery, after the supposed origin of the ancient vases.

were not mere meaningless groups, like the Watteau shepherds and shepherdesses on Dresden china, and many strange theories were at first promulgated as to the purposes for which the vases were made and the subjects thereon depicted. Three main lines of interpretation seem to have been adopted by the writers of this period :—

(*a*) Passeri, Millin, Lanzi, and Visconti supposed that allusions were made to the life of the deceased person in whose tomb they were found; allegorical representations were given of his childish games, his youthful pastimes, or the religious and social ceremonies in which he took part.

(*b*) Italynski, in his preface to Tischbein's work, enunciates the strange notion that they allude to events of Greek and Roman history: for instance, three draped men represent the three chief archons of Athens, or three women conversing, Veturia, the mother of Coriolanus, with her daughter and daughter-in-law, considering whether she should appear as a suppliant before her son. The utterly fantastic and unscientific nature of these explanations was self-evident; the writers of the first group at any rate had a sounder basis for their theories, and on the analogy of the sculptured Greek tombstones might well have been near the truth.

(*c*) Another theory, which attained great popularity, and was even adhered to partially for some years afterwards by Panofka, Gerhard, and Lenormant, was that the subjects bore allusion to the Mysteries, more particularly the Eleusinian. The vases were regarded as presents given to the initiated, and the reason why their interpretation was so difficult was that they related to the secrets unfolded in those ceremonies. Many attempts were made to unlock those secrets and to show the mystic moral purport of the pictures; but all is the merest guesswork. The height of fantastic explanation is perhaps reached by Christie, whose work is quite worth perusal as a literary curiosity. Panofka, on the other hand, turned his attention to the inscriptions on the vases,[1] and discerned a symbolical meaning in these, reading into the names of artists rebuses on the subjects over which they were inscribed, *e.g.* Douris

[1] *Namen der Vasenbilder*, 1849.

is indicated by Athena with a spear (δόρυ) or Hermaios by a figure of Hermes.

(3) **Historical.**—The historical or scientific method of studying Greek vases consists mainly in classifying them according to different periods, and within that period to different schools. To these main considerations the artistic merits of the vases and the explanation of the subjects are subordinated. The reason for this is obvious. The artistic and mythological interest of the vases is soon exhausted, and receives no new impetus from new discoveries. Now, with the comparative study of vases this is not the case. Any day may bring forth a new discovery which will completely revolutionise all preconceived theories; hence there is the constant necessity for being "up-to-date," and for the adjustment of old beliefs to new.

But the historical method is not entirely of modern growth. As long ago as 1767 the first attempt was made by D'Hancarville[1] to classify vases according to their age. Taking such scanty data as were available, he divided Italian vases into five classes, ranging from "some centuries before the foundation of Rome" down to the reigns of Trajan, the Antonines, and Septimius Severus, which "announc'd the total decadency of the Art." The earlier vases he sought to fix more precisely by reference to the history of painting as told by Pliny.

The Duc de Luynes, writing in 1832,[2] hesitates to define the exact age of the various styles, though he arranges them generally in six classes, ranging from the "Doric" or "Phoenician" vases down to barbaric imitations by the natives of Italy. According to him the red-figured vases lasted from the time of Perikles down to that of Pyrrhos Millingen was content with three periods only, his division[3] being: (1) ancient style, 700—450 B.C.; (2) fine style, 450—228 B.C.; (3) late style, 228 to Social War. Kramer distinguishes five epochs: (A) Egyptian style, 580—500 B.C.; (B) older style, 500—460 B.C.; (C) severe style, 460—420 B.C.; (D) fine style, 420—380 B.C.; (E) rich style, 380—200 B.C.[4] Gerhard[5] surmised

[1] Vol. ii. p. 108.

[2] *Ann. dell' Inst.* 1832, p. 145 ff.

[3] *Peintures*, p. viii.

[4] *Der Stil u. Herkunft der gr. Vasen*, p. 46 ff.

[5] *Rapporto Volcente*, in *Ann. dell'Inst.* 1831, p. 98 ff.

that the earliest vases might date from the ninth or tenth century B.C., the fine style extending over the fifth and fourth, while the decadence culminated in the second, and in the first century fictile vases were entirely supplanted by those of metal.

De Witte made a more detailed classification, extending to nine groups, and based rather on technical differences, as several of the groups are contemporaneous; but his classification is essentially a practical one, and may be regarded as forming a sound basis for all succeeding catalogues and treatises, as also for the arrangement of museums.

Jahn in his Introduction is content with four main headings, which for a general classification of a large collection is convenient enough, and has, in fact, been adopted in the Vase Rooms of the British Museum. Under this system the four divisions are: (1) Primitive; (2) Black-figured; (3) Red-figured; (4) Vases of the Decadence. In the Louvre, on the other hand, the arrangement is mainly geographical, according to the sites from which the vases have come.

It is recognised by modern archaeologists,[1] working on the lines laid down by Jahn in the three main divisions of his Introduction, that in dating and classifying a vase or series of vases three points must be taken into consideration: (1) circumstances of discovery; (2) technique and style; (3) inscriptions (when present). The various questions with which the modern study of vase-paintings has mainly to deal will be fully investigated in subsequent chapters, and it is not necessary to say more on this head. But we trust that sufficient attention has been drawn to the many-sided interests presented by—it is not necessary to say a collection of vases, but—a single vase.[2]

It may be worth while here to turn aside for a moment and study the rise and growth of the various great vase-collections of Europe. We may with pardonable pride regard the British

[1] The names of the chief modern writers on the subject are given in the Bibliography, and in the notes to the Historical Chapters (VI.-XI.), where also brief bibliographies are given.

[2] The writer is indebted to the Introduction to M. Pottier's admirable little Catalogue of the Vases in the Louvre for many ideas worked up in the foregoing pages.

Museum as standing at the head of these collections, possessing as it does the most representative collection of any, if not the largest. Hardly any known fabric is unrepresented, nor the work of any known artist; though here and there another museum may have the advantage—as, for instance, the Louvre in early black-figured fabrics, Naples in vases of Southern Italy (especially the large specimens), or Athens in various fabrics peculiar to Greece, such as the early vases of Thera and Melos, or the marvellous specimens of "transitional" handiwork found on the Acropolis of Athens.

The nucleus of the British Museum collection was, as has been indicated, formed by the vases obtained from Sir W. Hamilton in 1767, supplemented by those of Towneley and Payne Knight (1805-24): these are nearly all vases of the late period from Southern Italy. Between the years 1837 and 1845 a large quantity of fine black-figured and red-figured vases was acquired from the Canino collection, having been found on that estate at Vulci, and in 1836 acquisitions from M. Durand's sale had helped to swell the number of vases representing that site, including some very fine examples. In 1842 came the Burgon collection, mostly of small vases from Athens and the Greek islands; in 1856 the bequest by Sir William Temple of his collection, formed at Naples, added greatly to the value of the collection of later vases. In 1860-64 large numbers of vases of all periods from 700 B.C. to 400 B.C. were excavated by Salzmann and Biliotti at Kameiros in Rhodes; and from Ialysos in the same island came a number of Mycenaean vases by the generosity of Prof. Ruskin in 1870. Meanwhile, the Blacas collection, purchased in 1867, had added a large number, chiefly of red-figured and Italian vases, and in 1873 many more fine specimens from Capua, Nola, and elsewhere were acquired from M. Castellani. Of late years the chief additions have been from Cyprus, beginning with a few vases from Cesnola in 1876 down to the Turner Bequest excavations in 1894-96, and from the Egypt Exploration Fund's excavations at Naukratis and Daphnae (1884-86). Other acquisitions have been mostly in the form of isolated purchases, especially of the white lekythi and similar

classes; some have come from important collections, such as those of Forman, Tyszkiewicz, and Van Branteghem.

In 1870, when the old Catalogue was completed, the collection must have numbered over 2,000 painted vases, besides 1,000 undecorated; at the present day the total cannot be computed at less than 5,000, of which about 4,000 may be described as painted vases.

The Louvre collection in Paris[1] started life about a century ago under the first Napoleon, who established a ceramic section about 1797. Other vases were added from the Vatican and Naples; and meanwhile the Royal collection went to form the present Cabinet of Antiquities in the Bibliothèque Nationale. In 1818 the very limited collection was augmented by 564 vases from M. Tochon, and in 1825 came a magnificent acquisition of about 2,000 vases (mostly painted) from M. Durand. From this time till 1863 the growth was very slow, and the Louvre does not seem to have profited like other museums by the excavations at Vulci. In the latter year, however, another splendid collection of 2,000 painted and 1,400 unpainted vases was acquired from Count Campana, which necessitated the building of new galleries. The early B.F. fabrics, in which the Louvre is so pre-eminently rich, were all in this collection. During the last thirty years the only acquisitions of importance have been representative specimens from Greece and Cyprus; but the total number is now reckoned at 6,000.

The growth of the Berlin collection has been much more slow and consistent.[2] Its nucleus was derived from the collection of the Elector of Brandenburg described by Beger in 1701. Up to 1830 most of the vases acquired were from Southern Italy and Campania, including 1,348 from the Koller collection in 1828. In 1831, 442 vases and 179 specimens of Etruscan plain ware were acquired from the Dorow collection, and from 1833 to 1867 the activity of Gerhard procured fine specimens from time to time, while 174 were bequeathed by him at his death. When Levezow's Catalogue was published in 1834, it included 1,579 specimens; the next one by

[1] See Pottier's Catalogue, i. p. 59.

[2] See the Introduction to Furtwaengler's Catalogue.

Furtwaengler in 1885 describes more than 4,000. Of late years many valuable specimens have been derived from various parts of Greece.

These three may be regarded as the typical representative collections of Europe; those of Athens, Munich, Naples, and Petersburg are all of great merit and value, but chiefly strong in one particular department—Athens in early vases and Attic lekythi, Petersburg in late red-figured vases, and Naples in the fabrics of Southern Italy. Many of the finest specimens, however, are to be found in the smaller collections in the Paris Bibliothèque, at Florence, Vienna, Madrid, and in Rome. Of late years Europe has found a formidable rival in America, especially in the Museum of Fine Arts at Boston, which, backed by almost inexhaustible private benefactions, is gradually acquiring a large proportion of the signed vases and other *chefs-d'œuvre* which from time to time find their way into the market. The Metropolitan Museum at New York, on the other hand, rests its claim to distinction on the possession of General Cesnola's enormous collections of Cypriote pottery of all periods.

The gradual centralising of vases into public museums is a noteworthy feature at the present day. The private collections formed by so many amateurs at the beginning of the century have nearly all been long since dispersed and incorporated with the various national collections[1]; and those formed more recently are rapidly sharing the same fate. Hardly a year passes now without seeing the dispersion of some notable collection like those of M. Sabouroff, M. van Branteghem, Colonel Brown (Forman collection), or M. Bourguignon; and almost the only important one that still remains intact is that of Sig. Jatta at Ruvo (consisting almost entirely of South Italian vases). Now that the days are past when it was the custom for rich collectors to publish magnificently illustrated atlases of their possessions, this tendency to centralisation can only be welcomed both by artists and students. For the latter now it only remains to be desired that a scientific and

[1] Cf. the lists given by Jahn, *Vasens. zu München*, pp. xi, xiv, with (for instance) the notes appended to the pages of Reinach's *Répertoire*.

well-illustrated catalogue of every public museum should be available.

We append here a list of the principal museums and collections in Europe, which may form a supplement to that given by Jahn in 1854. The more important ones are printed in heavier type.

I. **GREAT BRITAIN.**

1. **London. British Museum** (see p. 24). Catalogue by C. Smith and Walters.
   South Kensington Museum (a few isolated specimens; also some from the Museum of Practical Geology Jermyn Street).
   Soane Museum (the Cawdor Vase).
2. **Oxford. Ashmolean Museum.** Catalogue by P. Gardner (1893).
3. **Cambridge. Fitzwilliam Museum.** Catalogue by E. A. Gardner (1896).
4. Deepdene (Dorking). Hope Collection. Inaccessible to students. Consists entirely of late vases from Southern Italy.
5. Numerous private collections, among the more important being—
   Richmond. The late Sir F. Cook.
   Castle Ashby. Marquis of Northampton.
6. Harrow School Museum (a fine "Theseus" Kylix and Krater with Centaurs). Catalogue by C. Torr (1887).
7. Edinburgh.

II. **FRANCE.**

1. **Paris. The Louvre** (see p. 25). Catalogue by Pottier (in progress).
   Bibliothèque Nationale. Catalogue by A. de Ridder (1902).
   Dzialynski Collection. See De Witte, *Coll. à l'Hôtel Lambert.*
2. Marseilles Museum. Catalogue by Froehner (1897).
3. Rouen Museum.
4. Boulogne Museum.
5. Compiègne Museum.
6. Sèvres Museum.

III. **BELGIUM AND HOLLAND.**

1. Brussels.[1] See Cat. of Musée de Ravestein.
   Somzée Collection (now dispersed).
2. Amsterdam. Six Collection.
3. Leyden Museum. See Roulez, *Vases de Leyde.*

IV. **GERMANY.**

1. **Berlin.** **Antiquarium** (see p. 25). Catalogue by Furtwaengler (1885).
2. Altenburg.
3. Bonn.
4. Breslau.
5. Brunswick.
6. Dresden.
7. Frankfurt. Museum Städel.
8. Gotha.
9. Heidelberg.
10. **Karlsruhe.** Catalogue by Winnefeld (1887).
11. Leipzig.
12. **Munich.** Catalogue by Jahn (1854).
13. Schwerin.
14. **Würzburg.** Antikenkabinet.
    Coll. Bankó.

V. **DENMARK AND SWEDEN.**

1. Kopenhagen. Catalogue by Smith (1862).
2. Stockholm.

VI. **RUSSIA.**

1. **Petersburg.** **Hermitage.** Catalogue by Stephani (1869).
   Stroganoff Coll.
   Pisareff Coll.
2. Dorpat (University).

VII. **AUSTRIA.**

1. **Vienna.** **Oesterreichisches Museum.** Catalogue by Masner (1891).
   K.-K. Kabinet.
   University.

[1] The collection made by Baron Hirsch in Paris is now incorporated with this Museum.

2. Cracow. Czartoryski Coll.
3. Prague. Pollak Coll.
4. Trieste. Museum.

VIII. **SWITZERLAND.**

1. Berne
2. Geneva } All unimportant for Greek Vases.
3. Zürich

IX. **SPAIN.**

Madrid.

X. **ITALY AND SICILY.**

1. Acerra. Spinelli Coll.
2. Adria. Museo Bocchi. Publication by Schöne.
3. Arezzo. Chiefly Roman Arretine ware.
4. **Bologna. Museo Civico.** Catalogue by Pellegrini (1900).
   Università.
5. Capua. Campana Coll.
6. Cervetri. Ruspoli Coll.
7. Chiusi. Museum.
   Casucchini Coll. (but see p. 73).
8. Corneto. Museum.
   Bruschi Coll.
9. Florence. Museum.
10. **Naples. Museo Nazionale.** Catalogue by Heydemann (1872).
11. Orvieto. Museum.
    Faina Coll.
12. Palermo. Museum.
13. Parma.
14. Perugia. Museum.
15. **Ruvo. Jatta Coll.** Catalogue by Sig. G. Jatta (1869).
16. Taranto. Museum.
17. Terranuova (Gela). Private collections.
18. **Rome. Vatican (Mus. Gregoriano).** Guide by Helbig.
    Museo Capitolino.
    Museo Papa Giulio.
    Numerous private collections: Hartwig, Torlonia, Castellani, etc., and Deutsches Arch. Inst.

XI. **GREECE.**

1. **Athens.** **National Museum.** Catalogue by Couve and Collignon (1902).
   Do. (Acropolis Collection). Catalogue in progress.
   Trikoupis Coll.
   Other private collections.
2. Eleusis. Museum (local finds).
3. Candia (Crete).

XII. **ASIA MINOR.**

Smyrna. Various private collections.

XIII. **CYPRUS.**

Nicosia. Cyprus Museum. Catalogue by Myres and Richter (1899).
Private collections at Larnaka, Nicosia, and Limassol.

XIV. **EGYPT.**

Cairo. Ghizeh Museum.

XV. **AMERICA.**

1. **Boston.** Catalogue by Robinson.
2. New York. Metropolitan Museum. Atlas of Cesnola Collection from Cyprus published.
3. Baltimore.
4. Chicago.

CHAPTER II

SITES AND CIRCUMSTANCES OF DISCOVERY OF GREEK VASES

Historical and geographical limits of subject—Description of Greek tombs —Tombs in Cyprus, Cyrenaica, Sicily, Italy—Condition of vases when found—Subsequent restorations—Imitations and forgeries—Prices of vases—Sites on which painted vases have been found : Athens, Corinth, Boeotia, Greek islands, Crimea, Asia Minor, Cyprus, North Africa, Italy, Etruria—Vulci discoveries—Southern Italy, Sicily.

BEFORE dealing with Greek vases in further detail, it may be as well to say something of the circumstances under which, and the localities in which, they have been discovered. And further, we must clearly define the limits of our subject, both historically and geographically.

(1) **Historical.**—It may seem somewhat paradoxical to doubt whether the primitive pottery found on Greek soil ought, strictly speaking, to be called Greek. In a succeeding chapter we shall have occasion to touch upon the question of the ethnological origin of this pottery, which, in the opinion of some authorities, is not the product of Greeks as we understand the term, but of some Oriental nation, such as the Phoenicians. It is, however, enough for our present purpose that it has been found on Greek soil, and that it forms a stage which we cannot omit from a study of the development of Greek pottery, seeing that its influence can be plainly traced on later fabrics.

Turning to the other limit of the subject, we find that nearly all the latest vases, belonging to the period of the Decadence, were manufactured in Southern Italy or Etruria. But nearly all bear so unmistakably the stamp of Greek influence, however degenerate and obscured, that we can only regard them as made

by Greek artists settled in the colonies of Magna Graecia, or at any rate by native workers in direct imitation of the Greeks.

We may roughly define our historical limits as from 2500 B.C., the approximate age of the early pottery of Crete, Cyprus, and Hissarlik, down to 200 B.C., when the manufacture of painted vases came to an end under the growing dominion of Rome. It was formerly supposed that the senatorial edict of 186 B.C., forbidding the performance of Bacchanalian ceremonies in Italy, was the means of putting an end to this industry, but this is hardly borne out by facts; it rather died a natural death owing to the growing popularity of relief-work both in terra-cotta and in metal (see Chapters XI. and XXII.).

(2) **Geographical.**—Having defined our historical limits, it remains to consider the extent of Greek civilisation during that period, as attested by archaeological or other evidence. Besides the mainland of Greece and the islands of the Aegean Sea, the whole of Asia Minor may be regarded as in a measure Greek, although practically speaking only a strip of territory along the western coast became really Hellenised, and we shall not be concerned with pottery-finds in any other part of the country.[1] To the north-east, Greek colonisation penetrated as far as Kertch and other places in the Crimea, known to the ancients as Panticapaeum and the Bosphoros respectively. In the Eastern Mediterranean the island of Cyprus will demand a large share of our attention. Egypt, again, has yielded large numbers of vases, mostly from the two Greek settlements of Naukratis and Daphnae; and farther to the west along the north coast of Africa was the Greek colony of Kyrene, also a fruitful site for excavators.

The rest of the ground is covered by the island of Sicily and the peninsular portion of Italy from Bologna southwards. Greek vases have occasionally turned up in Spain, Gaul (*i.e.* France and North Italy), as at Marseilles (Massilia), where primitive Greek pottery has been found, and also in Sardinia;

[1] Curiously enough, the relative proportions of Greek and Oriental civilisation in Asia Minor are almost exactly the same at the present day as in the sixth century B.C. The Greeks are mostly to be found in towns like Smyrna, and the adjoining islands, while the central part of the country is almost entirely Turkish.

but the Western Mediterranean sites are chiefly confined to Southern Italy and Etruria. In fact, till recent years these regions were almost our only source of information on Greek pottery, as has already been pointed out.

Generally speaking, it may be said that all Greek vases have been found in tombs, but the circumstances under which they have been found differ according to locality. We propose in the succeeding section to say something of the nature of the ancient tombs, and the differences between those of Greece, Cyprus, Italy, and other sites.

Of finds on the sites of temples and sanctuaries it is not necessary to say much here; the explanation of such discoveries will receive some attention in Chapter IV., and the individual sites will also be noted in the next section of this chapter. It is a rare occurrence to find complete vases under these circumstances, as they generally owe their preservation to the fact that they have been broken in pieces and cast away as rubbish into holes and pits. The most notable instance is the remarkable series of fragments discovered on the Acropolis at Athens.

Greek tombs are not usually very remarkable in character,[1] being for the most part small and designed for single corpses; this may possibly account for the comparatively small size of the vases discovered on most Hellenic sites. In the earlier tombs at Athens and Corinth the pottery was found at a very great depth below the soil. The six shaft-graves in the circle at Mycenae are of great size, and contained large quantities of painted pottery; an exact reproduction of the sixth, found by M. Stamatakis in 1878, with its contents, is in the National Museum at Athens. Here also are reproductions of two typical fifth-century Greek tombs containing sepulchral lekythi,[2] and showing how the vases were arranged round the corpse.[3]

Rock-graves are seldom found in Greece, the normal form of tomb being a hole or trench dug in the earth, either filled in

[1] See for references to descriptions of tombs Hermann, *Lehrbuch d. Antiq.* iv. (1882), p. 377.

[2] Room K, Cases 69-72.

[3] For specimens of typical Athenian tombs see Stackelberg, *Gräber der Hellenen*, pl. 7. Fig. 1 gives a reproduction of a cist full of vases from *ibid.* pl. 8. For an admirable description of the tombs of the Dipylon, see *Ath. Mitth.* 1893, p. 74 ff.

with earth or covered with tiles (as at Tanagra). The rock-grave is almost exclusively Asiatic, but some fine specimens were found at Kertch in the Crimea.[1] Some large ones have also been found in Rhodes,[2] but the most typical form of tomb there is a square chamber cut out of the hard clayey earth, approached by a square vertical shaft and a door. They generally contained single bodies, round which were ranged vases and terracotta figures. Sir A. Biliotti, in his diary of the excavations at Kameiros (1864), also records the finding of tombs cut in the clay in the form of longitudinal trenches,

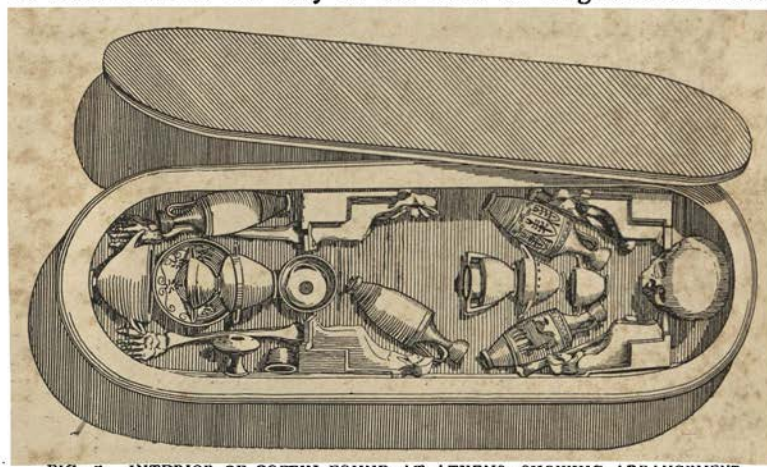


FIG. 1. INTERIOR OF COFFIN FOUND AT ATHENS, SHOWING ARRANGEMENT OF VASES.

covered with flat stones forming a vaulted roof. Others were merely troughs cut in the surface of the rock and covered with stones and earth. In the shafts of the first type of tomb large jars or *πίθοι* were often found containing the bones of children (see page 152). Nearly all these tombs have yielded Greek vases of all dates. In the island of Karpathos[3] Mr. J. T. Bent found tombs containing early pottery, consisting of two or three chambers with stone benches round the sides.

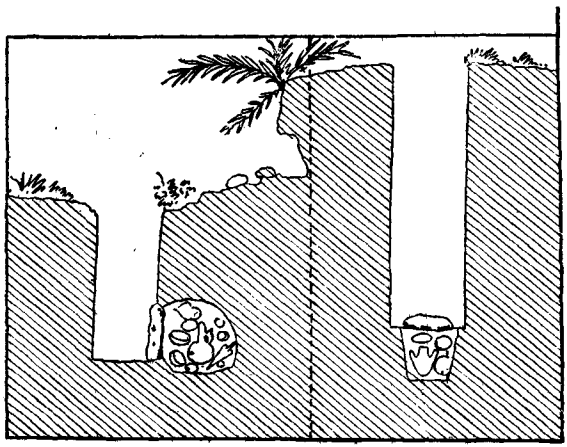
The tombs of Cyprus are especially interesting for two

[1] *Compte-Rendu*, Atlas, 1859, pls. 5-6; Macpherson, *Antiqs. of Kertch, passim.*

[2] *Arch. Zeit.* 1850, p. 209, pl. 19.

[3] *Journ. Hell. Stud.* vi. p. 237.

reasons: firstly, that they exhibit types not found elsewhere; and, secondly, that they vary in size and character at different periods of the island's history. In the earliest tombs of the Bronze Age period (down to about 800 B.C.) we find a very simple type, consisting of a mere oven-like hole a few feet below the surface of the ground, with a short sloping δρόμος leading to it (Fig. 2). These tombs have very rarely been found intact, and in most cases are full of fallen earth, so that exact details of their original arrangement can seldom be obtained. Each tomb generally contained a few exported Mycenaean vases



From *Ath. Mitth.*

FIG. 2. DIAGRAM OF BRONZE AGE TOMBS, AGIA PARASKEVI, CYPRUS.

and a large number of local fabric, usually hand-made and rude in character. The rich cemetery of Enkomi is, however, an exception, for here we find large *built* tombs, with roofs and walls of stone. Sometimes the Bronze Age tombs were in the form of a deep well.[1]

In the Graeco-Phoenician period (about 700—300 B.C.) the "oven" type of tomb is preserved, but on a larger scale and at a greater depth, and often reached by a long flight of stone steps. These tombs usually contain large quantities of the local geometrical pottery, as many as eighty or a hundred vases

[1] See for illustrations of tombs at Agia Paraskevi, near Nicosia, *Ath. Mitth.* 1886, xi. p. 209 ff., and Suppl. pl. 2, from which Fig. 2 is taken.

being sometimes found in one tomb. At Curium and elsewhere, where the tombs contain Greek painted vases, they are sometimes in the form of narrow ramifying passages.

The tombs of the Hellenistic period are of a very elaborate character, especially those of Roman date, with long narrow δρόμος leading to a chamber some ten by twenty feet or more, round the walls of which are sarcophagi and niches; but these tombs seldom contain any but plain and inferior pottery, the manufacture of painted vases in the island having come to an end, as in the rest of Greece.

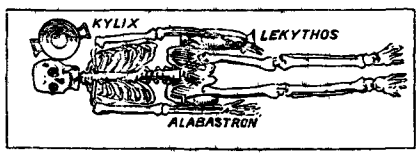
Frequently a tomb was found to contain pottery of widely different periods, especially in cemeteries such as Amathus and Curium, where the finds are of all dates, showing that the tombs were used again and again for burials.[1]

The tombs in the Cyrenaica, which were explored by Mr. Dennis and contained many Greek vases, he describes as follows[2]: "The great majority of the tombs were sunk in the rock, in the form of pits, from 6 to 7 feet long, from $3\frac{1}{2}$ to $4\frac{1}{2}$ feet wide, and from 5 to 6 feet deep. . . . Vases were sometimes placed in all four corners of the sepulchre, but this was rare; they were generally confined to two corners, often to one. The most usual place was the corner to the right of the head, and this was the place of honour; for here a Panathenaic vase in the tomb of a victor, a ribbed amphora of glazed black ware, or more commonly an ordinary wine-*diota*, would be deposited upright, with a number of smaller vases within it, or at its foot, either figured or of black or plain ware, according to the circumstances of the deceased. Occasionally small vases, or sometimes terracotta figures, were placed along the sides of the tomb, between the head and feet of the corpse; but I do not remember ever to have found vases deposited on the breast, or under the arms of the deceased, as was often the case in the Greek tombs of Sicily."

[1] For specimens of Cypriote tombs of all periods the reader is referred to Cesnola's *Cyprus; Brit. Mus. Excavations in Cyprus*, 1893-96; *Journ. Hell. Stud.* ix. p. 264 (Paphos) and xi. p. 19 ff. (Poli).

[2] *Trans. Roy. Soc. Lit.* 2nd Ser. ix. (1870), p. 162.

Mr. Arthur Evans has given an interesting account of the tombs at Gela (Terranuova) in Sicily, from which he has excavated many fine vases for the Ashmolean Museum.[1] Chronologically the limits of their date can be ascertained, between the foundation of Gela in 589 B.C. and its depopulation by the Carthaginians in 409 B.C., but a few tombs belong to the subsequent period down to 284 B.C., when it was finally destroyed by the Mamertines. In the early graves containing B.F. vases skeletons were found; these tombs were in the form of terracotta cists with gabled covers and tiled floors. The next stage, containing R.F. vases, has vaulted roofs made of two pieces of stone. During this period cremation-pits containing ashes and bones are sometimes found; the burnt bones were placed in kraters and covered with shallow vessels. In these were found white lekythi, in some respects rivalling those of Athens; but the subjects are domestic rather than sepulchral, and they are probably, like many of the B.F. and R.F. vases, local fabrics. Some of the tombs with B.F. vases are in the form of chambers with vaulted cement roofs. In the earlier tombs the disposition was usually as follows: a kylix on the left side of the head, an alabastron under the right arm, and a lekythos under the left (Fig. 3). The tombs of Selinus, which are all of early date, have been described by a local explorer.[2]



From *Ashmolean Vases.*

FIG. 3. DISPOSITION OF VASES IN TOMB AT GELA, SICILY.

We next review the types of tombs in Italy from which vases have been obtained. Those at Vulci, and in the Etruscan territory generally, from which the finest and largest vases have been extracted, are chambers hewn in the rocks. The early tombs of Civita Vecchia and Cervetri are tunnelled in the earth; in Southern Italy, especially in Campania, they are large chambers, about two feet under the surface. In D'Hancarville's

[1] Gardner, *Cat. of Vases in Ashmol. Mus.* p. vii.

[2] Cavallari in *Bull. della Comm. di Antich. in Sicil.* 1872, v. p. 10, pl. 3.

work (see p. 17) an illustration is given [1] of a tomb in Southern Italy, which is constructed of large blocks of stone, arranged in squared masses, called the Etruscan style of masonry, in contradistinction to the Cyclopean. The walls are painted with subjects, the body is laid upon the stone floor, and the larger vases, such as the kraters, are placed round it. The jugs are hung upon nails round the walls. Fig. 4 gives an example of a tomb of this kind from Veii. A full account, with illustrations, of the tombs excavated in the Certosa at Bologna about thirty years ago, has been given by Signor Zannoni.[2] The tombs of Southern and Central Italy were made upon the same plan, and the same description applies to both sites.[3]

The most ordinary tombs were constructed of rude stones or tiles, of a dimension sufficient to contain the body and five or six vases; a small one near the head and others between the legs, and on each side, more often on the right than on the left side. An oinochoe and phiale were usually found in every tomb; but the number, size, and quality of the vases varied, probably according to the rank or wealth of the person for whom the tomb was made. The better sort of tombs were of larger size, and constructed with large hewn stones, generally without, but sometimes completed with, cement; the walls were stuccoed, and sometimes ornamented with painted patterns.

In these tombs, which were like small chambers, the body lay face upwards on the floor, with the vases placed round it; sometimes vases have been found hanging upon nails of iron or bronze, attached to the side walls. The vases in the larger tombs were always more numerous, of a larger size, and of a superior quality in every respect to those of the ordinary tombs, which had little to recommend them except their form.

Many of the larger and more important Etruscan tombs have also been described and illustrated by Dennis in his work on Etruria, especially those of Vulci and Corneto, which are famous

[1] Vol. ii. p. 57, vignette. Models of this tomb exist in cork, and specimens may be seen in the Winchester College Museum and Eton School Library.

[2] *Scavi di Certosa*, 1875, text and plates.

[3] For tombs at Ruvo see Jatta, *Cat. del Museo*, p. 53 ff.

both for their contents and for the paintings which adorn their walls.[1] In the basement of the British Museum may be seen large models of Etruscan tombs in which the arrangement is carefully reproduced.

The vases, as we have already mentioned, are often ranged round the dead, being hung upon or placed near the walls, or piled up in the corners. Some hold the ashes of the deceased; others, small objects used during life. They are seldom perfect, having generally either been crushed into fragments by the weight of the superincumbent earth, or else broken into sherds, and thrown into corners. Some exhibit marks of burning,

FIG. 4. THE CAMPANA TOMB AT VEII, AS IT APPEARED WHEN OPENED.

probably from having accompanied the deceased to the funeral pyre. Sometimes they are dug up in a complete state of preservation, and still full of the ashes of the dead.[2] These are sometimes found inside a large and coarser vase of unglazed clay, which forms a case to protect them from the earth.

Almost all the vases in the museums of Europe have been mended, and the most skilful workmen at Naples and Rome were employed to restore them to their pristine perfection. Their defective parts were scraped, filed, rejoined, and supplied

[1] Reference may also be made to Martha, *L'Art Étrusque*, p. 183 ff.

[2] For an example in the B.M. see E 811 in the Fourth Vase Room, Cases 6-7. A plain jar of late date, from Halikarnassos, full of calcined bones, is in the Terracotta Room of the B.M., Case 29.

with pieces from other vases, or else completed in plaster of Paris, over which coating the restored portions were painted in appropriate colours, and varnished, so as to deceive the inexperienced eye. But either through carelessness, or else owing to the difference of process, the restorations had one glaring technical defect: the inner lines are not of the glossy hue of the genuine vases, and there is no indication of the thick raised line which follows the original outline in the old paintings. Sometimes the restorer pared away the ancient incrustation, and cut down to the dull-coloured paste of the body of the vase. Sometimes he even went so far as to paint figures in a light red or orange oil paint on the black ground, or in black paint of the same kind on orange ground. But in all these frauds the dull tone of colour, the inferior style of art, and the wide difference between modern and ancient drawing and treatment of subjects, disclose the deception. The calcareous incrustation deposited on the vases by the infiltration into the tombs of water, containing lime in solution, can be removed by soaking the vases in a solution of hydrochloric acid.[1]

In other cases vases with subjects have been counterfeited by taking an ancient vase covered entirely with black glaze, tracing upon it the subject and inscription intended to be fabricated, and cutting away all the black portions surrounding these tracings, so as to expose the natural colour of the clay for the fictitious ground. When red figures were intended to be counterfeited, the contrary course was adopted, the part for the figures only being scraped away, and the rest left untouched. Vases, indeed, in which the ground or figures are below the surface should always be regarded with suspicion, and their genuineness can only be determined by the general composition and style of the figures, and by the peculiarities of the inscriptions. The latter also are often fictitious, being painted in with colours imitating the true ones, and often incised; indeed, nearly all inscriptions incised after the vase has been baked are liable to give rise to suspicion. The difference of style in the composition of groups, and especially small points in the drawing, such as the over-careful drawing of details, the indication of

[1] See also Rathgen, *Konservirung von Altertumsfunden*, p. 67.

nails, and various other minute particulars, are also criteria for detecting false or imitated vases. Water, alcohol, and acids will remove false inscriptions, but leave the true ones intact.

Greek vases are not so easy to imitate as terracotta figures, the main difficulty being the black varnish, which can never be successfully reproduced. Acids or alcohol will always remove modern counterfeits, but cannot touch the original substance. Since the discovery in Greece of white-ground vases forgers have had a better chance, and they have often ingeniously availed themselves of genuine ancient vases on which to place modern paintings. But the antique drawing is exceedingly difficult to imitate. In former times Pietro Fondi established manufactories at Venice and Corfu, and the Vasari family at Venice, for fictitious vases,[1] and many such imitations have been made at Naples for the purpose of modern decoration.

The first to make such an attempt in England was the famous potter Wedgwood, whose copy of the Portland Vase is well known. His paste is, however, too heavy, and his drawings far inferior to the antique in freedom and spirit. At Naples, chiefly through the researches and under the direction of Gargiulo, vases were produced, which in their paste and glaze resembled the antique, although the drawings were vastly inferior, and the imitation could be at once detected by a practised eye. They were, indeed, far inferior in all essential respects to the ancient vases. Even soon after the acquisition of the Hamilton collection by the public, the taste created for these novelties caused various imitations to be produced. Some of the simplest kind were made of wood, covered with painted paper, the subjects being traced from the vases themselves, and this was the most obvious mode of making them. Battam also made very excellent facsimiles of these vases, but they were produced in a manner very different from that of the ancient potters, the black colour for the grounds or figures not being laid on with a glaze, but merely with a cold pigment which had not been fired, and their lustre was produced by a polish. In technical details they did not equal the imitations made at Naples, some of the best of which deceived both archaeologists and collectors.

[1] Westropp, *Epochs of Painted Vases*, p. 17.

Sometimes illustrations of vases which never had any real existence have appeared in publications. One of the most remarkable of these fabricated engravings was issued by Bröndsted and Stackelberg in a fit of archaeological jealousy. A modern archaeologist is seen running after a draped woman called ΦΗΜΗ, or "Fame," who flies from him exclaiming, ΕΚΑΣ ΠΑΙ ΚΑΛΕ, "A long way off, my fine fellow!" This vase, which never existed except upon paper, deceived the credulous Inghirami, who too late endeavoured to cancel it from his work. Other vases, evidently false, have also been published.[1]

M. Tyszkiewicz, the great collector, in his entertaining *Souvenirs*,[2] gives some interesting illustrations of the methods of Italian forgers of vases, of which he had frequent experience. "The Neapolitans," he says, "excel above all others in this industry; and it is in ancient Capua, now Sta. Maria di Capua Vetere, that the best *ateliers* for the manufacture of painted vases are situated." But "even the famous connoisseur Raimondi, who was considered the master of his art at Sta. Maria—even he could never invent altogether the decoration of a vase so as to make it pass for an antique. Only if this talented artist could get just a few fragments of a fine vase, he was clever enough to be able, by the aid of illustrations of vases in museums or in private collections, to reconstruct the whole subject. He replaced the missing parts, and threw such an air of uniformity over the vase that it was almost impossible to tell what was modern. But if you tried to wash a vase faked up in this manner, in pure alcohol chemically rectified, you would find that the modern portions would vanish, while the ancient paintings would remain. Neither Raimondi nor any one else could ever manage to discover the secret of the ancient potters—how to obtain the background of a brilliant black colour, improperly known as the *varnish of Nola*. To disguise their failure in this respect, the forgers are obliged,

[1] Inghirami, *Vasi Fittili*, i. pl. 13; a false vase is also published in Passeri, 300, and others in D'Hancarville, ii. 71, 84. The worst specimen is perhaps that engraved by Millin, *Peintures*, ii. pls. 54-5 (reproduced in Reinach's edition), which yet for a long time found general acceptance. As a curiosity and a warning it deserves perpetuation.

[2] Eng. transl. p. 180 ff.

when the vase is entirely reconstructed and repainted, to cover it all over with a varnish of their own invention; but the surface of this varnish, although brilliant, lacks the freshness and brightness of that used by the ancients. Relatively this surface appears dull, and vanishes the moment it is washed with alcohol."

At Athens also, says M. Tyszkiewicz, laboratories have been established for making vases, of which he was acquainted with three. These forgers excel in turning out the white-ground vases, which, even when antique, cannot resist the action of alcohol. For the same reason they apply gilding to their black-and-red vases, because this also yields to its action. The large prices fetched by the white vases (see below) have stimulated their activity in this direction, and their efforts have not been without artistic merit, though failing in technique.[1]

On the subject of forgeries in relation to Greek vases the literature is very scanty; but reference may be made to Prof. Furtwaengler's *Neuere Fälschungen von Antiken*, which raises some very interesting questions in regard to forgeries, though his conclusions may sometimes be thought rather arbitrary.

Of the prices paid for painted vases in ancient times, no positive mention occurs in classical authorities, yet it is most probable that vases of the best class, the products of eminent painters, obtained considerable prices. For works of inferior merit only small sums were paid, as will be seen by referring to the account of the inscriptions which were incised underneath their feet, and gave their contemporary value (Chapter XVII.). In modern times we have no information about the prices paid for these works of art till about seventy years ago, when they began to realise considerable sums. In this country the collections of Mr. Towneley, Sir W. Hamilton, Lord Elgin, and Mr. Payne Knight all contained painted vases; but as they included other objects, it is difficult to determine the value placed on the vases. The sum of £8,400 was paid for the vases of the Hamilton collection, one of the

[1] Curiously enough there was in M. Tyszkiewicz's own collection a white-ground cup with the subject of Phrixos (*Sale Cat.* pl. 35), which is certainly open to suspicion.

most remarkable of the time, and consisting of many beautiful specimens from Southern Italy. The great discoveries of the Prince of Canino in 1827, and the subsequent sale of numerous vases, gave them, however, a definite market value, to which the sale of the collection of Baron Durand, which consisted almost entirely of vases, affords some clue. His collection sold in 1836 for 313,160 francs, or about £12,524. The most valuable specimen in the collection was the vase representing the death of Kroisos (Fig. 132), which was purchased for the Louvre at the price of 6,600 francs, or £264. The cup with the subject of Arkesilaos (p. 342) brought 1,050 francs, or £42. Another magnificent vase, now in the Louvre, with the subject of the youthful Herakles strangling the serpents,[1] was only secured for France after reaching the price of 6,000 francs, or £240; another, with the subject of Herakles, Deianeira, and Hyllos,[2] was purchased for the sum of 3,550 francs, or £142. A krater, with the subject of Akamas and Demophon bringing back Aithra, was obtained by Magnoncourt for 4,250 francs, or £170.[3] An amphora of the maker Exekias (B 210) was bought by the British Museum for £142. The inferior vases of course realised much smaller sums, varying from a few francs to a few pounds; but high prices continued to be obtained, and the sale by the Prince of Canino in 1837 of some of his finest vases contributed to enrich the museums of Europe, although, as many of the vases were bought in, it does not afford a good criterion as to price. An oinochoë with Apollo and the Muses, and a hydria, with the same subject, were bought in for 2,000 francs, or £80 each. A kylix, with a love scene, and another with Priam redeeming Hektor's corpse,[4] brought 6,600 francs, or £264. An amphora with the subject of Dionysos, and the Euphronios cup with Herakles and Geryon (Plate XXXVIII.), sold for 8,000 francs, or £320 each. A vase with the subject of Theseus seizing Korone (Chap. XIV.), another by Euthymides with the arming of Paris, and a third with Peleus and Thetis, sold for 6,000 francs, or £240. The collector Steuart was offered 7,500 francs, or £300, for a large krater, found in Southern Italy, ornamented with

[1] *Gaz. Arch.* 1875, pl. 14.
[2] Reinach, ii. 62 (in Louvre).
[3] B.M. E 458.
[4] Munich 404.

the subject of Kadmos and the dragon; £120 was paid by the British Museum for a fine krater ornamented with the exploits of Achilles[1]; £100 for an amphora of Apulian style, with the subject of Pelops and Oinomaos at the altar of the Olympian Zeus.[2] For another vase, with the name of Mousaios, £120 was paid, and £100 for the well-known Athenian prize vase excavated by Burgon.[3] At Mr. Beckford's sale the Duke of Hamilton gave £200 for a lekythos representing a procession of Persians, which is now in the British Museum (E 695). At Naples the passion for possessing fine vases outstripped these prices; 2,400 ducats, or £500, was given for a vase with gilded figures discovered at Capua. Still more incredible, early in the nineteenth century, 8,000 ducats, or £1,500, was paid to Vivenzio for the vase now in the Naples Museum representing the sack of Troy; 6,000 ducats, or £1,000, for one with a Dionysiac feast; and 4,000 ducats, or £800, for the grand vase with the battle of the Amazons, published by Schulz.[4] Another vase, for which the sum of £1,000 was paid, was the so-called Capo di Monte Vase, purchased by Mr. Edwards, at Naples.[5] For the large colossal vases of Southern Italy from £300 to £500 has been given, according to their condition and style. But such sums will not be hereafter realised, now that their place in the estimation of the connoisseur has been rightly taken by the fine red-figured or white ground vases, which, owing to the stringency of modern laws, seldom now find their way into the market. The vases with white grounds and polychrome figures have also been always much sought after, and have realised large prices, the best-preserved examples fetching as much as £70 or £100.[6] Generally the highest prices have been paid for artistic merit, but these have been surpassed in the case of some vases of high literary or historical value. As a general rule vases with inscriptions have always been most sought after, especially when the

[1] B.M. E 468.
[2] B.M. F 331.
[3] B.M. B 130.
[4] See Reinach, *Répertoire*, ii. p. 277.
[5] Millin-Reinach, i. pl. 49; now at Deepdene (?).
[6] This has been especially the case of late years, as in the sale of M. van Branteghem's collection in 1892, when a small kylix signed by Sotades cost as much as £400, and two others slightly less.

inscriptions are the signatures of the names of potters or artists, or names of historical interest. The inferior kinds have fetched prices much more moderate, the kylikes averaging from £5 to £10, the amphorae from £10 to £20, the hydriae about the same; the kraters from £5 to £20, according to their general excellence, the oinochoae about £5, and other shapes from a few shillings to a few pounds. The charming glaze and shapes of the vases discovered at Nola have often obtained good prices from amateurs. Those of Greece Proper have also fetched higher prices than those of Italy, on account of the interest attached to the place of their discovery.[1]

We propose now to give a survey of the principal localities in which the fictile products of the Greeks have been discovered, and the excavations which have taken place on these sites. It need hardly be said, however, that it is quite impossible to detail all the places where specimens of common pottery have been found.

I. GREECE

We naturally begin with Greece, following the geographical order observed by Jahn,[2] as the mainland and centre of Hellenic civilisation; and since Athens was not only the principal, for many years the only, centre of the manufacture of Greek vases, but has also been the most prolific source of recent discoveries, it is to Athens that we first turn our attention.

Athens was duly celebrated in ancient times as the chief home of the ceramic industry.[3] The clay of Cape Kolias is eulogised by Suidas for its excellent qualities, and the extent of the *Κεραμεικός*, or potters' quarter, is still visible beyond the Dipylon gate. One of the earliest painted vases found on Attic soil was the famous Panathenaic amphora discovered

[1] Some account of the prices paid for vases will be found in De Witte's *Description des Antiquités et Objets d'Art qui composent le cabinet de feu M. le Chev. E. Durand*, Paris, 1836; and in the same author's *Description d'une collection de vases peints et bronzes antiques provenant des fouilles de l'Étrurie*, Paris, 1837.

[2] His Introduction to the Munich Vase Catalogue gives a good account of finds of vases in Greece up to that time (1854); see p. xxi ff.

[3] Cf. Athenaeus, i. 28 C; xi. 484 F, and 480 C.

by Burgon in 1813 outside the Acharnian gate, and now in the British Museum.[1] The tomb in which it was found also contained remains of burnt bones, a lekythos, and other small vases. The subjects are: on one side Athena brandishing a

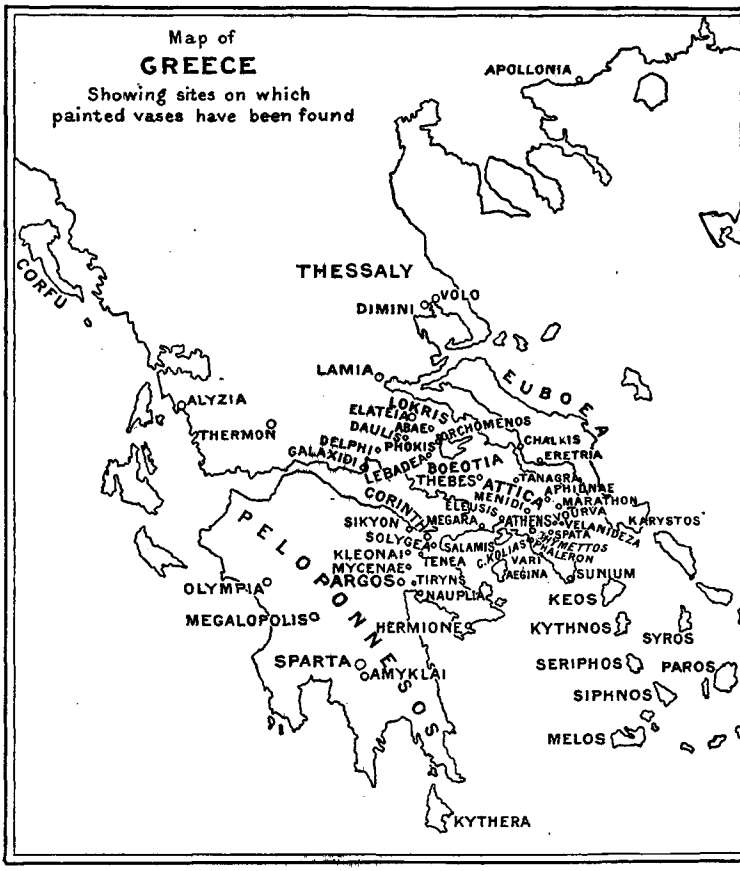


FIG. 5. MAP OF GREECE.

spear, with the inscription ΤΟΝ ΑΘΕΝΕΘΕΝ ΑΘΛΟΝ ΕΜΙ, "I am a prize from the games at Athens"; on the other, a man driving a *biga*, or two-horse chariot. The date is usually considered to be about 560 B.C. It was rightly identified by

[1] B 130. See *Cat.* vol. ii. for list of publications of this vase.

the early writers as one of the prize-vases described by Pindar in the passage we have quoted elsewhere (p. 132), and was the means of identifying many other vases similarly painted and inscribed, but found on other sites, as belonging to the same class. A considerable number of vases found on Greek soil, mostly at Athens, were published by Stackelberg in 1837,[1] but little was done for many years in the way of systematic excavation. The National Museum was opened shortly after the declaration of Greek independence, and assisted by royal benefactions. The law forbidding the export of antiquities has now been in force for many years, but unfortunately has had a bad as well as a good effect, in that the vendors of surreptitious finds are wont to give imaginary accounts of the circumstances of their discoveries, in order to screen themselves.

To give anything like a description of the vases found at Athens would be useless here, where so many classes are illustrated by the finds; it may, however, be worth while to note a few of the most typically Athenian groups of pottery. (1) Earliest in date are the Dipylon vases, which were found outside the gate of that name, and have from their conspicuous character given a name to a whole class. They are, however, fully treated of in Chapter VII. (2) The numerous fragments of vases found on the Acropolis, which can all be dated anterior to 480 B.C., include many exceedingly beautiful and unique specimens of the transitional period of vase-painting, some having black, some red figures.[2] Although in few cases anything more than fragments have been preserved, yet these fragments are enough to show that the originals were masterpieces surpassing even the finest examples from the Italian cemeteries. They will, it is to be hoped, shortly be made known to the world by means of an exhaustive catalogue. (3) The white lekythi, discussed at length elsewhere (Chapter XI.), besides forming a class by themselves, are specially remarkable as being almost peculiar to Athens. It is not, however, certain that they were not made

[1] *Gräber der Hellenen.* He also gives some description of the tombs in which they were found, and the nature of their contents (see above, p. 33).

[2] Good summaries of these discoveries will be found in the *Arch. Anzeiger*, 1893, p. 13 ff., and *Berliner Philol. Wochenschr.* 1895, p. 59.

also at Eretria, where many fine ones have been found of late years; but otherwise none have been found outside Attica, with the exception of a few importations to Cyprus, Locri in Italy, or Sicily. (4) A group of late R.F. vases of the "fine" style, mostly of small size and sometimes with polychrome decoration. The drawing is free and graceful, but tends to carelessness; the subjects are drawn chiefly from the life of women and children. Some of the smaller specimens were no doubt actually children's playthings.

Elsewhere in Attica vases have not been numerous. *Eleusis* has yielded some interesting fragments,[1] including a plaque of about 400 B.C., with an interesting representation of the local deities, found in 1895; at *Marathon* the grave of the fallen warriors has been recently explored, and was found to contain both B.F. and R.F. vases, but none of particular merit.[2] The find was, however, important, as illustrating Greek methods of burial. The tombs of *Phaleron* are important, as having yielded a special class of early vases which are known by the name of the site.[3] These Phaleron vases combine in an interesting manner the characteristics of the Geometrical and Rhodian or Oriental styles, being akin to the so-called Proto-Corinthian. The beehive tombs at *Menidi* and *Spata* and other tombs at *Haliki*, near Marathon, have yielded Mycenaean pottery of the usual types, and an instructive find of early Geometrical pottery has been made at *Aphidna*.[4] There are vases in the museums of Athens and Berlin of various dates, to which the following provenances are assigned: Alike, Alopeke, Hymettos,[5] Kephissia, Cape Kolias,[6] Pikrodaphni,[7] Peiraeus,[8] Sunium,[9] Thorikos,[10] Trakhones,[11] Vari,[12] Velanideza, and Vourva, the two latter near

[1] *E.g.* Bibl. Nat. 865 *bis*; Ἐφ. Ἀρχ. 1885, pls. 8-9; 1888, pl. 12; 1898, pls. 2-5; 1901, pl. 1.

[2] *Ath. Mitth.* 1893, p. 46 ff.: see also Bibl. Nat. 496 *bis*, 506.

[3] Bibl. Nat. 417 is from the neighbouring Munychia.

[4] *Ath. Mitth.* 1896, p. 385 ff.; and see below, p. 278.

[5] Berlin 56 = *Jahrbuch*, 1887, pl. 5.

[6] A fine R.F. and polychrome kylix = *Mon. dell' Inst.* x. 37 *a* = Reinach, *Répertoire*, i. p. 207; also Athens 688 = Reinach, i. 164.

[7] Berlin 2030; Athens 1167.

[8] Berlin 2493, 2690; *Arch. Zeit.* 1880, pl. 16 = Reinach, i. p. 428.

[9] Berlin 2373.

[10] Ἐφ. Ἀρχ. 1895, pl. 11 (Mycenaean).

[11] Berlin 1887-89.

[12] Athens 1241; *Amer. Journ. of Arch.* 1903, p. 320.

Marathon.[1] *Megara*[2] has produced little beyond specimens of a class of late bowls with designs in relief, sometimes known as "Megarian bowls," but more probably of Boeotian origin (see p. 53).

Corinth, as a centre of the manufacture of vases, occupied in early times a position in Greece only second to Athens. Down to the first half of the sixth century it actually seems to have held the pre-eminence; but after the rise of Athens it sank altogether into obscurity, and ceased to produce any pottery at all after about 520 B.C. But we know from Strabo[3] that the fame of Corinthian wares still existed in Roman times, for in the days of Julius Caesar the tombs of the new Colonia Julia were ransacked for the vases which were the admiration of the rich nobles of Rome. The expression used by Strabo, *ὀστράκινα τορεύματα*, seems to imply that these were probably specimens of the later relief-ware which did not become popular in Greece before the fourth century, but then gradually ousted the painted fabrics.

Corinth, like Athens, claimed the invention of pottery and of the wheel; it was also one of the supposed centres of the origin of painting in Greece. We read, moreover, that when Demaratos fled thence to Italy he took with him two artists named Eucheir and Eugrammos, who doubtless helped to develop the art of vase-making in Etruria. The vases found here are nearly all of the early archaic and B.F. periods, from the so-called Proto-Corinthian wares down to ordinary B.F. fabrics. The Mycenaean and Geometrical styles are practically unrepresented, but occasional finds have been made of Attic B.F. and R.F. vases. With these exceptions all were actually made at Corinth, as is shown in many cases by the inscriptions in the local alphabet painted upon the vases.

The earliest discovery, and in some respects one of the most remarkable, was the vase known as the Dodwell pyxis (see p. 315), which was acquired by that traveller in 1805, and

[1] See for the Vourva vases Athens 592 ff.; *Ath. Mitth.* 1890, p. 318 ff.; *Jahrbuch*, 1903, p. 124 ff.; and p. 299 below.

[2] See Dodwell, *Tour*, ii. p. 180. Stephanus of Byzantium speaks of the pottery of Megara (*s.v.*) See also Athens 1858; Petersburg 1563 *a*.

[3] viii. p. 381: cf. p. 134.

is now at Munich. In 1835 a large number of vases were found by peasants at Chiliomodi, the ancient *Tenea*,[1] one of which represented Herakles and the Centaur Nessos; most of these are now at Athens. In 1843 Ross[2] records the discovery of over a thousand at various sites, on the Isthmus and at or near Tenea, and ever since that time tomb-digging has been carried on without intermission. The best collections of Corinthian vases are those at Athens, Berlin, and the British Museum. But the most noteworthy find at Corinth has been that of the series of plaques (πίνακες) or votive tablets discovered at Penteskouphia in 1879, most of which are now at Berlin. They are all of votive character, and come from the rubbish-heap of a temple of Poseidon; most of them are painted with figures of and inscribed with dedications to that deity, and they belong to the late seventh or early sixth century B.C.[3] The British Museum possesses a R.F. "pelike" from *Solygea*, near Corinth, and isolated finds are also recorded from *Sikyon*.[4]

Turning to the adjoining state of Argolis, we find three sites of special importance in early times—Mycenae, Tiryns, and Argos. Of these the two former had ceased to have any importance in historic times, but this is amply compensated for by the wonderful discoveries of the Mycenaean period.[5] At *Mycenae* large quantities of painted pottery were found in the six shaft-tombs in the Agora, five of which were excavated by Dr. Schliemann; outside the Acropolis, and possibly belonging to a later period, was found the remarkable vase with figures of warriors marching.[6] The finds at *Tiryns* were chiefly fragmentary, but at *Nauplia*, where considerable quantities were found, there were some fragments with painted designs of chariots like the vases from Cyprus (p. 246).[7] Mycenaean

[1] Ross, *Arch. Aufs.* ii. p. 344; Bibl. Nat. 101: see also Jahn's *Einleitung*, p. xxv.

[2] *Ibid.* i. p. 57.

[3] See p. 316.

[4] *E.g.* Bibl. Nat. 94, 313, 1179.

[5] See generally Furtwaengler and Loeschcke, *Myken. Vasen*, p. 50; for notices of Mycenaean fragments by early travellers, Dodwell, *Tour*, ii. p. 237, and Burgon in *Trans. Roy. Soc. Lit.* 2nd Ser. ii. (1847), p. 258 ff., with plate opposite p. 296.

[6] Fig. 88, p. 297.

[7] *Ibid.* pls. 15, 21, p. 45; Ἐφ. Ἀρχ. 1895, pl. 11.

pottery has also been found at *Asine*,[1] and the site of the Heraion at *Argos*, recently excavated by the American School, has yielded an exhaustive series of fragments of pottery, representative of nearly every known fabric from Mycenaean times down to the best Greek period. They have not as yet been published, but may be expected to yield important results. Other occasional finds are reported from Argos, including a curious archaic vase with a representation of Herakles and Kerberos.[2] At *Kleonae*, on the northern frontier of the state, was found a Corinthian vase signed by Timonidas, and there are vases from *Hermione* in the museum at Athens.[3]

In the rest of the Peloponnese finds of painted vases have been exceedingly rare. The Berlin Museum possesses a B.F. vase found at *Megalopolis*,[4] and isolated finds are also recorded from *Magoula* in Laconia and *Amyklae* near Sparta.[5] At *Olympia* painted vases were very rare, but several different fabrics from the Proto-Corinthian downwards are represented by fragments.[6]

In Central and Northern Greece the only fruitful region has been **Boeotia**, particularly its capital, *Thebes*. This city, like Corinth, has principally yielded early vases. As has been shown elsewhere (pp. 286, 300), Boeotia was the home of more than one indigenous fabric, notably the local variety of Geometrical ware, partly parallel with that of Athens and other sites, partly a degenerate variety with local peculiarities, forming a transition to the Phaleron and Proto-Corinthian fabrics. The last-named have frequently been found at Thebes, notably the Macmillan lekythos in the British Museum. Signed vases of local fabric, with the names of Gamedes, Menaidas, and Theozotos, are in the British Museum and in the Louvre. On the site of the Temple of the Kabeiri, near Thebes, a remarkable series of late B.F. pottery came to light, evidently a local fabric, with dedicatory inscriptions and subjects of a grotesque or caricatured

[1] Furtwaengler and Loeschcke, p. 47.

[2] *Arch. Zeit.* 1859, pl. 125 = Reinach, i. 389 : see also *Bull. dell' Inst.* 1832, p. 62 ; *Ann. dell' Inst.* 1847, p. 250.

[3] *Cat.* 1615, 1901, 1931-32 : see also *Branteghem Sale Cat.* 94.

[4] *Cat.* 1974.

[5] Bibl. Nat. 166 ; *Class. Review*, 1891, p. 73 ; Ἐφ. Ἀρχ. 1892, pl. 4.

[6] See *Ergebnisse*, iv. p. 198 ff.

nature.[1] They are quite peculiar to the site, and seem to have had a close connection with its religious rites. Besides many examples of the Geometrical and Corinthian fabrics, there have been found at Thebes several specimens of the so-called Megarian bowls with reliefs, of the second century B.C.; the proportion to other sites is such that Thebes has been thought to be the centre of the fabric. Another local fabric is that produced by *Tanagra* about the end of the fifth century B.C., consisting of small cups, toilet-boxes, etc., with somewhat naïve outlined designs.[2] The vase-finds here have served as evidence for the dating of the terracotta statuettes, with which no painted fabrics were found, but only ribbed or moulded black-glaze wares, characteristic of the fourth and third centuries B.C.[3] Where painted vases have been found, the accompanying statuettes were all of an archaic or even primitive type.[4]

In excavations at *Orchomenos* in 1893[5] the French School unearthed large numbers of fragments, Mycenaean, Boeotian Geometrical, Proto-Corinthian, Corinthian, and Attic black-figured; Mycenaean vases have been found at *Lebadea*, and Thespiae, Thisbe, and Akraiphiae are also mentioned as sites where painted vases have been found.[6] Very few sites in Northern Greece have yielded finds of pottery, but the Athens Museum contains R.F. vases from *Lokris*, *Phokis*, and *Lamia*[7] on the Malian Gulf, and finds are also recorded from Anthedon,[8] Atalante,[9] Exarchos, and Galaxidi in Lokris, from Elateia,[10] Abae,[11] and Daulis in Phokis, and from Thessaly. Fragments of painted pottery were seen by early travellers at *Delphi*.[12] At *Daulis* the pottery was of Mycenaean character,[13] as also

[1] See p. 391.

[2] See p. 451.

[3] See Kekulé, *Thonfiguren aus Tanagra*, p. 13.

[4] Isolated vase-finds from Tanagra are the early B.F. tripod, Berlin 1727, and the fine R.F. krater, Athens 1259.

[5] *Bull. de Corr. Hell.* xix. p. 177.

[6] Cf. Athens 678, 809, 1156, 1158.

[7] Vases from Lamia are Nos. 1621 and 1984; from Lokris, 1354, 1434; from Phokis, 1177, 1181.

[8] *Branteghem Sale Cat.* No. 96.

[9] *Ibid.* No. 43; Berlin 2938.

[10] B.M. E 719, an alabastron formerly in the Branteghem collection.

[11] *Ath. Mitth.* 1889, p. 151: see below, p. 217. A late B.F. vase of "Kabeirion" style.

[12] Fragments from Delphi are recorded in *Ann. dell' Inst.* 1841, p. 10; Jahn, *Vasens. zu München*, p. xxv; *Morgenblatt*, 1835, p. 698.

[13] Furtwaengler and Loeschcke, p. 43.

that from the beehive-tombs of Volo in Thessaly and its neighbourhood. A recent excavation at *Dimini* is reported to have yielded very early painted vases of a quite new, probably local ware, with affinities to the Cycladic types of Thera and elsewhere.[1]

Turning now to the Greek islands, we find somewhat more extensive and interesting results. Little indeed has been found in the Ionian Islands of the western coast,[2] even in *Corfu*, which as a rule has been fruitful in works of art. The only vases worth mentioning from that island are those found in the cemetery of Kastrades, in the tomb of Menekrates.[3] The contents of this tomb, which are all of an early and somewhat mixed character, are now in the British Museum; they can be dated from the inscription on the tomb about 600 B.C. Travelling round by the south of the Peloponnese, we come to *Kythera*, which has yielded a cup (now in the British Museum) remarkable for its inscription, *ἡμικοτύλιον*; it is illustrated below, p. 135. *Salamis*[4] again has produced little, but some interesting pottery of a transitional character from Mycenaean to Geometrical has been found.[5]

Aegina appears to have been a pottery centre in early times, and recent discoveries are adding to our knowledge of its fabrics. Among the older finds from this island are a fine early oinochoe in the British Museum (from the Castellani collection), formerly supposed to be from Thera,[6] and several very fine red-figured and white-ground vases, notably the elegant R.F. astragalos or knucklebone-shaped vase in the British Museum, with its figures of dancers; a white Athenian lekythos, with the subject of Charon,[7] and two beautiful vases now in the Munich Museum (208, 209), with polychrome designs on a white ground.[8] In

[1] *Ath. Mitth.* 1901, p. 237.

[2] For Kephallenia see *J.H.S.* xxiv. p. 126.

[3] *Ann. dell' Inst.* 1847, p. 247, note 5; Mustoxidi, *Delle cose Corciresi*, i. p. 271; B.M. A 1670.

[4] A beautiful polychrome lekythos in the B.M. (D 70=Plate LV.) is from this island, on the authority of Raoul-Rochette (*Peint. Antiq.* p. 415); but see Benndorf, *Gr. u. Sic. Vasenb.* p. 42, where it is attributed to Aegina.

[5] Perrot, *Hist. de l'Art*, vii. pp. 51, 208.

[6] *Ath. Mitth.* 1897, p. 259.

[7] Stackelberg, pl. 48; *Magazin Encycl.* 1811, ii. p. 140; and see note 4.

[8] See also Brongniart, *Mus. Céram.* pl. 13, 11, and *Traité*, i. p. 576; *Bull. dell' Inst.* 1829, p. 113, 1830, p. 129; *Ann. dell' Inst.* 1837, p. 135, 1842, p. 103, 1847, p. 250; and numerous vases in the Bibl. Nat. (see p. 689 of Catalogue).

1892-93 the British Museum acquired a series of Mycenaean, Corinthian, and Attic vases from a find on this island,[1] and other examples of Corinthian and Attic vases are recorded.[2] In 1894 excavations were made on the site of the so-called temple of Aphrodite, and yielded a number of early vases chiefly Mycenaean, Geometrical of the Athenian type, and a large series of Proto-Corinthian wares, some of unusual size.[3] Some of this pottery may possibly be of local fabric. More recently the excavations on the site of the great Doric temple (now shown to be dedicated to the goddess Aphaia) have yielded an extensive series of fragments of different dates.[4] Aegina was always celebrated in antiquity for its artistic achievements, and that it was a centre for pottery is indicated by an anonymous comic writer, who addresses the island as "rocky echo, vendor of pots" (*χυτρόπωλις*).[5]

Euboea possessed two important art-centres in Chalkis and Eretria. It is true that no vases have actually been found at Chalkis, but the existence of early B.F. vases with inscriptions in the local dialect amply testifies to the existence of potteries there (see p. 321). *Eretria*, on the other hand, has been carefully excavated in recent years, and has yielded many antiquities both of the early and of the finest period. Among the former are vases of a type akin to the earlier Attic fabrics, but distinguished by the use of a "pot-hook" decorative ornament, and others more akin to the Attic B.F. vases, but clearly of local make[6]; among the latter are so many fine white-ground lekythi (as well as other forms) that it has been supposed that they must have been specially manufactured here as well as at Athens. The British Museum has lately acquired several white-ground and late R.F. vases of considerable beauty from this site. Many years ago an inscribed Corinthian vase was found at Karystos.[7]

[1] *J.H.S.* xvii. p. 77; xviii. p. 281 ff.

[2] B.M. B 8; Berlin 1682 = Reinach, i. 441; Reinach, i. 118, 2; B.M. E 508; Gerhard, *A.V.B.* iii. 238 = Reinach, ii. 120 (in Berlin), signed by Ergotimos.

[3] Pallat in *Ath. Mitth.* 1897, p. 265.

[4] *Berl. Phil. Woch.* 1901, pp. 1001, 1436.

[5] See Hesychius, *s.v.* 'Ηχώ; he adds, *λέγει δὲ Αἴγιναν, ἐπειδὴ ἐκεῖ ὄστρακα πολλά ἐστι.*

[6] *Jahrbuch*, 1903, p. 124 ff.; *Ἐφ.* 'Αρχ. 1901, pls. 9-12, p. 173 ff.

[7] Athens 618 = Baumeister, iii. p. 1963, fig. 2098.

The Cyclades.—In these islands we find traces of absolutely the earliest fabrics known in the history of Greek pottery, but later finds of painted vases are comparatively rare. Mycenaean pottery has been found in the islands of Amorgos,[1] Delos and Rheneia, Kythnos, Seriphos, Sikinos, Syros, Thera, and Melos.[2] Other finds recorded are from Paros and Antiparos (early fabrics), Keos, Kimolos,[3] Kythnos,[4] Siphnos, and Syros[5]; a remarkable Ionic vase in the Louvre, found in Etruria, has also been attributed to an island fabric, that of Keos,[6] and another at Würzburg to that of Naxos.[7] The chief finds of "Cycladic" or pre-Mycenaean pottery are those from the volcanic deposits of the island of *Thera* (see p. 260), which, from the circumstances of their discovery and the geological history of the island, are supposed to date back beyond 2000 B.C. They are painted with vegetable patterns in brown on a white ground, and have chiefly been excavated by the French School during the years 1867-74; a few are in Athens, but the majority are in the Louvre or the Sèvres Museum. In the superincumbent layers Mycenaean and Geometrical pottery came to light,[8] and a fragment of a large Melian amphora with the so-called Asiatic Artemis, now in the Berlin Museum (No. 301), is stated by Ross to have come from this island. The same traveller saw here large πίθοι with painted subjects of early character and similar smaller vases, also some with black figures, in a private collection.[9] More recently (in 1900) excavations made in the Acropolis cemetery by German archaeologists yielded a large quantity of pottery, chiefly Geometrical in character, extending from the eighth to the middle of the sixth century B.C.[10]

[1] *Ath. Mitth.* 1886, p. 16.

[2] Furtwaengler and Loeschcke, p. 33.

[3] Ross, *Reisen*, iii. p. 25.

[4] Athens 1861.

[5] *Class. Review*, 1899, p. 468.

[6] E 732: see p. 357 and Fig. III.

[7] Furtwaengler and Reichhold, *Gr. Vasenmalerei*, p. 220.

[8] Furtwaengler and Loeschcke, p. 21. For Geometrical, see Brongniart and Riocreux, *Mus. de Sèvres*, pl. 13, figs. 4, 13, 15, 16.

[9] *Reisen*, i. p. 66; iii. p. 27. See also Berlin 3901, 4088; Brongniart, *Traité*, i. p. 577; Bibl. Nat. 19, 21, 22. The Sèvres vases mentioned by Brongniart were found about thirty feet below the volcanic deposits.

[10] See *Ath. Mitth.* 1903, p. 1 ff.; H. von Gaertringen, *Thera*, vol. ii.

The vases found in *Melos* amount to a considerable number, of different ages and styles.[1] Recent excavations by the British School on the site of Phylakopi brought to light large quantities, not only of Mycenaean, but of pre-Mycenaean remains, including pottery.[2] Mr. Thomas Burgon's collection included many B.F. and later vases from Melos, now in the British Museum; they are mostly small and unimportant. Ross also saw painted vases in Melos.[3] The island is, however, chiefly celebrated for a class of early vases, few in number, but of exceptional merit, which have mostly been found in the island, and so are known as "Melian" amphorae (see below, p. 301). Recently, however, large numbers of fragments of similar pottery have been found at Rheneia, opposite Delos, and it is possible that Delos was the centre of the fabric, not Melos, as hitherto supposed.[4] They date from the seventh century B.C. Among the finds of later date from Melos, by far the most noteworthy is the Louvre Gigantomachia krater (see Chapter XII.).[5]

Turning now to the eastern group of Aegean Islands, known as the *Sporades*, we begin with *Lesbos*, where many fragments of B.F. and R.F. vases were found by Mr. Newton during his Vice-Consulate. From epigraphical evidence it seems probable that many of the early B.F. fragments found at Naukratis (see below) should be attributed to a Lesbian fabric, but this has not so far been established. Vases have also been found in Tenedos and Chios.[6]

Next we come to *Samos*, an island always renowned in antiquity for its fictile ware. The Homeric hymn to the potters is addressed to Samians. It was, however, in Roman times that its renown was especially great, and its connection with a certain class of red glazed wares has caused the name of "Samian Ware" to be applied indiscriminately but falsely

[1] See Jahn, *Vasens. zu München*, p. xxvi; Berlin 1886; *Rhein. Mus.* 1843, p. 435; Boettiger, *Vasengem.* i. p. 29.

[2] These are fully described and illustrated in a volume issued by the Hellenic Society (1904).

[3] *Op. cit.* iii. p. 15 ff.

[4] *J.H.S.* xxii. p. 46 ff.

[5] *Mon. Grecs*, 1875, pls. 1-2.

[6] *Rhein. Mus.* 1843, p. 435; Bibl. Nat. 873 (Chios); for Tenedos as a pottery centre see Dio Chrys. *Orat.* 42, 5; Plutarch, *Vit. aer. alien.* 2.

to all Roman pottery of that kind.[1] Finds of pottery have, however, been few and far between. The British Museum possesses a lekythos of the B.F. period in the form of a sandalled foot (Plate XLVI.), which Mr. Finlay obtained here. More recently Dr. Böhlau excavated some early cemeteries, and found a considerable quantity of pottery of the "Ionic" type, which enabled him to establish a Samian origin for certain wares of the sixth century.[2] *Kalymnos* was explored by Mr. Newton in 1856, but has yielded little beyond plain glazed ware,[3] and the same may be said of Kos, although the latter was famed in antiquity for its amphorae and culinary vessels. The small islands of *Telos*,[4] *Nisyros*, *Chiliodromia*,[5] and *Karpathos* have been explored at different times by Ross, Theodore Bent, and others, and have yielded vases of a late R.F. period, corresponding to the later Athenian fabrics, several of which are in the British Museum. Messrs. Bent and Paton have also found pottery of the Mycenaean period in Kalymnos and Karpathos[6]; and similar remains are reported from *Kos*.[7]

But all other discoveries in the islands are far exceeded both in extent and importance by those of **Rhodes**.[8] They are principally due to the labours of Messrs. Salzmann and Biliotti, who diligently explored the island during the 'sixties, and the results as far as pottery is concerned, extend from Mycenaean times down to the destruction of Kameiros in 404 B.C. The earliest finds were on the site of *Ialysos*, and these are exclusively of "Mycenaean" type. The tombs containing Mycenaean vases were cut in the rock in quadrangular form, with vaulted δρόμος and steps. This site was explored by the above-named gentlemen about the years 1867-70, and the results of the excavation, by the liberality of Prof. Ruskin, found their way into the British Museum. Their archaeological value was

[1] For ancient references to Samian ware see Chapter XXII., where the subject is discussed in detail.

[2] *Aus ion. u. ital. Nekrop.* (1898); he also found Cyrenaic, Corinthian, and Attic pottery (p. 125 ff.). See below, p. 336.

[3] See also *Arch. Zeit.* 1848, p. 280.

[4] See Ross, *Reisen*, iv. p. 44.

[5] Brongniart, *Traité*, i. p. 581 (plain wares only).

[6] *J.H.S.* viii. p. 446, pl. 83.

[7] Furtwaengler and Loeschcke, p. 33.

[8] See Pottier, *Louvre Cat.* i. p. 130 ff.

not recognised for some years; but when the discoveries of Mycenae became known, it was at once seen that the Ialysos pottery must fall into line with them.

Kameiros is first heard of as a Dorian colony of the eleventh century, and its history extends down to 408 B.C. It was fully and systematically excavated between 1859 and 1864. Far more abundant and comprehensive than the Ialysos results, the Kameiros finds illustrate the history of Greek pottery from the Geometrical period[1] down to the time of its decline, and include many fine specimens of the B.F. and R.F. periods, as well as numerous examples of the Rhodian, Corinthian, and other early classes, from the eighth to the sixth century B.C. The most interesting discovery was perhaps that of the *pinax*, with the fight over the body of Euphorbos, which is described elsewhere (p. 335). Among the finer specimens of the later period is the polychrome *pelike* with Peleus wooing Thetis. The majority of these finds are now in the British Museum, together with porcelain, bronze, and other objects illustrating the early pottery; part also went to the Louvre and to Berlin. The latest vases are of the free and careless type of late R.F. Athenian fabrics, and since they are known to be not later than the fifth century they supply valuable evidence for the dating of R.F. vases.

Crete in all probability will, before many years are over, supply a great mass of material for the history of early Greek pottery. Until recent years it has received little attention from travellers or explorers, and few vases of any period have come therefrom into our Museums.[2] But Crete has always been looked to by archaeologists for the solution of the Mycenaean problem, and the systematic excavations now at length set on foot are even richer in their yield of Mycenaean and primitive pottery than those of Rhodes, Melos, and Cyprus. Mr. J. L. Myres found at *Kamarais* in 1894 a series of fragments of painted pottery with designs in opaque colours on a black

[1] See on the Geometrical pottery Pottier, *op. cit.* p. 136. It is probably imported, although Dümmler (*Jahrbuch*, 1891, p. 268) thinks otherwise.

[2] There is at least one late R.F. vase from Crete in the National Museum at Athens (*Cat.* 1851, 1860, 1921). See for other instances of earlier finds, below, p. 269; Furtwaengler and Loeschcke, p. 22; Pottier, *Louvre Cat.* i. p. 176.

ground, which he regarded as pre-Mycenaean.[1] This theory was subsequently borne out by the discoveries of Messrs. Arthur Evans and D. G. Hogarth at *Knossos* and elsewhere, which have been very rich in pottery of a similar kind, and also in vases with remarkably naturalistic patterns in relief.[2] Other finds have been made in the Dictaean Cave,[3] at Zakro[4] and Palaeokastro,[5] at Phaestos,[6] Praesos, Erganos and Kourtes, and Kavousi.[7]

Before we turn our attention to the continent of Asia we must hark back to the European mainland, working round by the northern coasts of the Aegaean and Euxine Seas. Macedonia and Thrace have yielded scarcely anything,[8] but when we come to the northern shore of the Black Sea we find at *Kertch*, in the Crimea (the ancient Panticapaeum), a remarkable centre of Greek artistic production. The finds here are practically limited to one period, covering little more than a hundred years, and mainly illustrate the art of the fourth century B.C. There are, however, many magnificent vases, which in style, if not in shape or composition of subjects, must belong to an earlier time—namely, that of the fine red-figured period.[9] The excavations have mostly been undertaken by the Russian Government, in whose museum at the Hermitage the collections are now to be seen, but much was done unsystematically by Englishmen and others at the time of the Crimean War. It cannot be said that more than about one-quarter of the total find of 400 vases have any merit; they are chiefly small, with red figures, and of the later fine period; some are polychrome and ornamented with gilding.[10] The

[1] *Proc. Soc. Antiqs.* 2nd Ser. xv. (1895), p. 351 ff.

[2] See *J.H.S.* xxiii. p. 157 ff. for an estimate of the Knossos pottery; also p. 265 below.

[3] *British School Annual*, 1899-1900, p. 94 ff.; *J.H.S.* xxi. p. 78 ff.

[4] *Ibid.* 1900-01, p. 121 ff.; *J.H.S.* xxiii. p. 248 ff.

[5] *Ibid.* 1901-2, p. 289 ff.; 1902-3, p. 297.

[6] *Rendiconti dell' Accad. dei Lincei*, 1900, p. 631.

[7] *American Journ. of Arch.* 1901, p. 371 ff., 302, 128; *British School Annual*, 1901-02, p. 235 (Praesos).

[8] Nos. 98 and 99 in the collection of M. van Branteghem were two fine R.F. "aryballi" from Apollonia in Thrace.

[9] The reader who wishes to gain a comprehensive idea of these vases is referred to the plates of the Atlas to Stephani's *Compte-Rendu de la Comm. imp. arch. de St.-Pétersbourg* (1861-83) = Reinach, *Répertoire*, i. p. 1 ff.

[10] See also Jahn, *Vasens. zu München*, p. xxvii.

most remarkable by far is the vase signed by the Athenian Xenophantos (p. 447); but that with the contest of Athena and Poseidon (Plate L.) is also an exceptionally fine specimen; and others have interesting subjects relating to the Eleusinian mysteries. At *Phanagoria* an early B.F. vase of Ionic style came to light.[1] Vases have also been found at Olbia on the neighbouring mainland, at Kief, at Temir Gora in Circassia, and on the modern sites of Blisnitza, Iouz Oba, Melek Chesme and Pavlovski-Kourgane in the Crimea.[2]

II. ASIA MINOR

The Troad first claims our attention. Here on the site of the second city of Troy, at Hissarlik, Dr. Schliemann found the earliest pottery at present known from Greek soil (see Chapter VI.). This has been generally dated about 2500—2000 B.C. In subsequent excavations Dr. Dörpfeld proved the sixth city to be the Homeric Troy, the remains from which, including pottery, are all of Mycenaean character. Later finds of pottery from the Troad are of no great importance[3]; some are of Aeolic or Ionian origin, and others seem to be from an inferior local fabric, consisting of flat bowls with looped side-handles, carelessly painted in matt-black silhouette with figures of ducks and other animals. Some of these were found in 1855-56 by Mr. Brunton on the sites of New Ilium and Dardanus; others by Mr. Calvert in 1875-76, and by Dörpfeld and Brueckner in 1893. The finds of the two first-named are in the British Museum, together with some poor R.F. vases of late style. From *Sigeion* two polychrome lekythi have been reported, resembling the Attic white-ground fabric[4]; Jahn also records finds of painted vases from *Lampsakos* and

[1] *Compte-Rendu*, 1870-71, pl. 4 = Reinach, i. 34.

[2] See an interesting article in *Anzeiger*, 1900, p. 151, on the relations of the Black Sea colonies to Greece, especially in regard to pottery.

[3] See Dörpfeld, *Troja und Ilion*, i. p. 304 ff.

[4] So Jahn, *Vasens.* p. xxvii, but from the illustration given in Choiseul-Gouffier's *Voyage pittoresque*, pt. 2, pl. 30, this seems doubtful.

Parion,[1] and a fine gilded vase with figures in relief has recently been found on the former site.[2]

In *Aeolis* and *Mysia* the finds have not been considerable, but some are of importance as throwing light on the existence of local fabrics. In a private collection at Smyrna there is or was a late B.F. vase from Assos, with careless silhouette figures.[3] At *Pitane* a very curious Mycenaean false amphora has been found, with figures of marine and other animals[4]; and at *Larisa* Dr. Böhlau has found fragments of early painted vases, probably a local fabric imitating that of Rhodes.[5] MM. Pottier and Reinach, in the course of their excavations at Myrina (1884-85), found pottery of various dates and styles: Mycenaean, Ionian, Corinthian, Attic B.F. and R.F., late R.F., and vases of the so-called Gnatia style (see p. 488) or with reliefs.[6] Among those which can be traced to an Ionic or local fabric there is a very remarkable one with a head of a bearded man. Pergamon does not seem to have yielded any vases, but *Kyme* may have been a centre of Ionic vase-manufacture (see Chapter VIII.). Some fragments of an early B.F. krater have been found there which presents similar characteristics to those of the Ionian fabrics mentioned below.[7]

Coming lower down the coast of Ionia we meet with the home of an important school of painting in the sixth century, which seems to have centred in the flourishing cities of Phocaea, Clazomenae and elsewhere round the Gulf of Smyrna. The actual finds of such vases in the neighbourhood is not great, but is compensated for by the remarkable series of painted terracotta sarcophagi discovered at Clazomenae, the finest of which is now in the British Museum. These, which obviously represent the characteristics of the Ionian school of painting, show such a close relation with a series of vases found at Naukratis and Daphnae in Egypt, and at Cervetri and elsewhere in Italy,

[1] Jahn, *Vasens.* p. xxvii.

[2] *Monuments Piot*, x. pls. 6-7.

[3] The style resembled that of B 80 in the Brit. Mus.

[4] See Perrot, *Hist. de l'Art*, vi. pp. 929, 931. The British Museum possesses a similar one from Kalymnos (p. 273).

[5] *Ion. u. ital. Nekrop.* pp. 86-7.

[6] *Louvre Cat.* ii. p. 274; Pottier and Reinach, *Nécropole de Myrina*, pp. 221, 499; *Bull. de Corr. Hell.* 1884, p. 509; *Ath. Mitth.* 1887, p. 228.

[7] *Röm. Mitth.* 1888, pl. 6; now in Brit. Mus.

MAP OF ASIA MINOR & THE ARCHIPELAGO
Showing sites on which painted vases have been found.

FIG. 6.

that the latter classes can only be regarded as of Ionian origin, or, if not imported, local Italian imitations of the Ionic wares. Such are the Caeretan hydriae which were directly imitated by the Etruscans.[1]

A vase obtained at *Phocaea* by Mr. W. M. Ramsay in 1880 (p. 254) appears to be an imported Cypriote fabric of late date, though archaic in appearance. At Smyrna little has been found, but there are some vases attributed thereto in the Leyden Museum. At *Clazomenae* some fragments of painted vases in the style of the Caeretan hydriae have recently been found, which help to establish the theories above mentioned.[2] *Teos* is associated with a particular kind of cup (*Τήιαι κυλίχναι*) mentioned by the poet Alcaeus,[3] but nothing has been found there, nor yet at Kolophon, Ephesos, or Miletos. In the interior regions of Asia primitive painted pottery is recorded from *Mount Sipylos*,[4] and also from *Sardis* on the sites of the tombs of the Lydian kings. From the tumulus known as Bin Tepe on the latter site the British Museum has obtained (through the agency of Mr. Dennis) some early pottery, which is decorated apparently in direct imitation of Phoenician glass wares. Fragments of Mycenaean and other primitive fabrics are reported from Cappadocia and from Gordion in Galatia,[5] and have been recently picked up by Prof. W. M. Ramsay at Derbe in Lycaonia.

In *Caria* early local fabrics seem to be indicated by finds at Mylasa and Stratonikeia (Idrias).[6] At *Assarlik* Mr. W. R. Paton found pottery of a transitional character from Mycenaean to Geometrical. Tralles and Knidos were famous in antiquity for pottery,[7] but have left virtually nothing, nor has Halicarnassos. A Mycenaean false amphora is reported from Telmessos in Lycia, and fragments of B.F. and R.F. vases from Xanthos.[8]

From the distant site of *Susa* in Persia an interesting find

[1] See generally Chapter VIII.

[2] *Ath. Mitth.* 1898, pl. 6, p. 38 ff.

[3] Athen. xi. 481 A. See also *Ath. Mitth.* 1900, p. 94.

[4] *Trans. Roy. Soc. Lit.* 2nd Ser ii. (1847), p. 258, and plate, fig. D.

[5] Chantre, *Recherches archéol.* pls. 8-14; *J.H.S.* xix. p. 37 ff.

[6] *Ath. Mitth.* xii. (1887), pp. 226, 376.

[7] Cf. Pliny, *H.N.* xxxv. 161; Athenaeus, i. 28 D; Lucian, *Lexiph.* 7. For pottery from Datcha, near Knidos, see *Rev. Arch.* xxv. (1894), p. 27.

[8] Jahn, p. xxvii.

has been recently reported,[1] of part of a R.F. rhyton in the form of a horse's head, on which is painted the figure of a Persian in polychrome on a white ground. It belongs to the period 500—480 B.C., and may have been carried off by the Persians when they sacked the Athenian Acropolis.

Cyprus.—This island is of special interest to us as being now the only classical land in our own possession. Although we have not perhaps utilised to the full extent the opportunities thereby afforded us for excavations, yet of late years much has been done, especially by the British Museum, to remedy this defect, and the collection of Cypriote antiquities in the national museum is now fully worthy of that institution and as representative as could be wished. Previous to the English occupation the island remained undisturbed, with a few exceptions, the first being the excavations of Mr. R. Lang at Dali (Idalion) in 1867. The finds here were chiefly of terracottas and sculpture, and are now in the British Museum, but, owing to the misconception of Cypriote history that formerly prevailed, have been somewhat incongruously placed in the Oriental Department. Meanwhile, another consul, General L. Cesnola, was not slow to make use of his opportunities, seeing in the obvious richness of the field, the chances of gaining great distinction as an explorer. Of his energy and liberality in the cause there can be little doubt; but he was not an archaeologist, and did not realise the value of scientific evidence, negative or positive. Hence, although he deserves a meed of praise as the pioneer of Cypriote exploration, his statements are not always sufficiently explicit to be used without hesitation. His extensive collections are now in the Metropolitan Museum at New York; the British Museum has a few of the vases, but lost the opportunity of acquiring the whole. Another English consul, Mr. Sandwith, also made a collection of Cypriote pottery, and, with an acuteness in advance of his time, made a successful attempt to classify it according to periods and styles. Lastly, a brother of General Cesnola's, A. P. di Cesnola, who lived for some time in the island, made large collections in the same manner as his brother, but with the same lack of scientific accuracy.

[1] *Comptes-Rendus de l'Acad. des Inscr.* Aug. 1902, p. 428 ff.; 1903, p. 216.

The record of discoveries since 1878 has been carefully systematised by Mr. J. L. Myres, who has given an excellent summary of results.[1] The cemeteries in which the island is so extraordinarily rich may be divided into two classes: Bronze Age tombs, including Mycenaean and earlier remains; and Graeco-Phoenician, with tombs of Hellenistic and Roman date. On some sites, such as Curium and Salamis, tombs of all periods are found.

Mr. Myres notes about thirty sites on which Bronze Age pottery has been discovered, mostly in the centre and east of

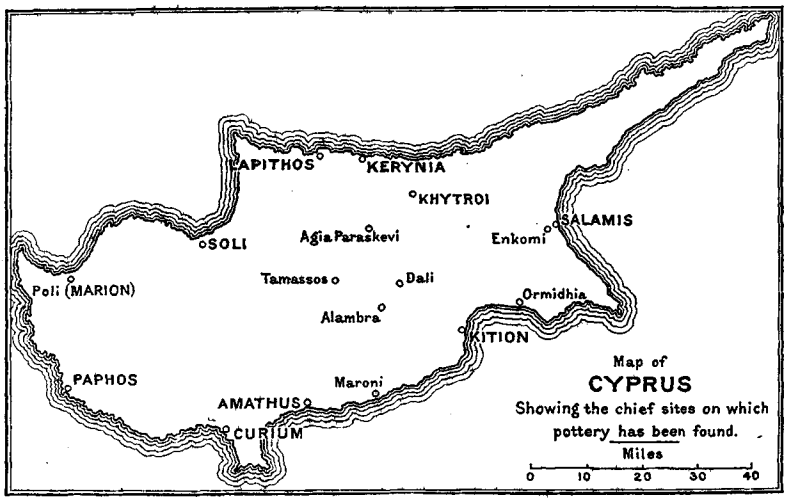


FIG. 7. MAP OF CYPRUS.

the island, *i.e.* in the more level and cultivated districts. The most important sites are Enkomi (Salamis), Curium, Alambra, Agia Paraskevi (Nicosia), Maroni, and Larnaka (several sites), at all of which Mycenaean pottery has been found, Enkomi being especially rich in this respect; others only contained local varieties, either of the earliest incised wares or of the hand-made pottery which seems to have been a later development.

Graeco-Phoenician pottery (700—300 B.C.) has been found in great quantities in all parts of the island, chiefly at Amathus, Dali, Larnaka (Kition), Curium, Poli (Marion),

[1] *Catalogue of Cyprus Museum*, Oxford, 1899.

Paphos (Kouklia), Salamis, and Tamassos. In conjunction therewith Hellenic vases have appeared at Amathus, Curium, Salamis, and especially at Poli, where some really fine R.F. vases have been found, some with artists' names.[1] Hellenistic pottery has appeared on most of the above sites, Poli and Curium supplying the best examples. The different varieties of Cypriote pottery are described in detail in Chapter VI.

III. AFRICA

Greek settlements in Africa were far fewer than in Asia, and in fact only two appear to have had any importance, these being the Ionic colony in the Egyptian Delta and the Dorian colony from Thera in the Cyrenaica. Mycenaean vases have, however, appeared spasmodically in Egyptian tombs of the eighteenth to twenty-first dynasties, the evidence for the date of those at Tell-el-Amarna (c. 1400 B.C.) being apparently well established. It should also be noted that pre-Mycenaean wares corresponding to the second city pottery at Hissarlik and the Kamaraes (Crete) pottery have been found at Kahun and elsewhere in the *Fayûm*, in tombs of the twelfth and thirteenth dynasties (2500—2000 B.C.).[2]

Painted and other pottery of the Hellenistic age has not infrequently been found in Egypt; the British Museum acquired a specimen from *Alexandria* in 1898 with a boy riding on a fish painted in opaque pink and blue on a red unglazed ground. Other examples come from Naukratis,[3] and from the Fayûm.[4] At Alexandria, where for obvious reasons no vases earlier than the third century could have come to light, a hydria was found in the catacombs with a myrtle-wreath painted on a light ground; this when discovered was filled with bones.[5] Other vases of the same type are said to be in the Louvre. In Mons. G. Feuardent's collection in New

[1] See Hermann, *Gräberfeld von Marion* (1888); *J.H.S.* xi. p. 41 ff., xii. p. 315; *Branteghem Sale Cat.* Nos. 14-18, 28-30.

[2] *J.H.S.* xi. p. 273.

[3] *B.M. Cat. of Vases*, iv. F 510-12.

[4] Petrie, *Hawara*, pl. 16, figs. 1-4.

[5] It was presented to the British Museum by Sir E. Codrington in 1830. Similar painted vases were found in Roman tombs at Curium, Cyprus (*Excavations in Cyprus*, p. 78).

York, the late Prof. Merriam saw a group of seventy-five vases from rock-cut tombs at Alexandria, some with inscriptions.[1] They include hydriae of a dark red clay, covered with a white slip on which are polychrome designs (Gorgoneia, armour, etc.); others of unglazed salmon-coloured clay, painted with wreaths, monsters, etc.; two-handled vases of black ware with ribbed body and twisted handles, decorated with medallions in relief and wreaths in white, like the vases of Gnatia (p. 488). The inscriptions are laid on in ink with a reed, or incised, the former being in MS. type; the method of dating is difficult to interpret, but they seem to belong to the middle of the third century.

The Ionian settlements of *Naukratis* and *Daphnae* (Defenneh) in the Delta have yielded very important results for the history of Greek pottery, though differing in extent. The finds of pottery at Daphnae may from the circumstances of discovery be dated entirely between 600 and 550 B.C.; and though only fragmentary, they are interesting not only as showing the results of Egyptian influences, but for the points of comparison they afford with the pottery of Ionic origin and the Clazomenae sarcophagi. At Naukratis, on the other hand, the finds form a complete series extending from the foundation of the city by Milesians about 650 B.C., down to the end of the fifth century, at which point importations of Greek pottery ceased. The earlier fabrics are by far the most important, being almost entirely of local character and distinguished by the white ground on which the Naucratite artist painted his designs or figures in various colours. Among the fragments of B.F. pottery were many with names of artists. These finds were all made among the rubbish-heaps of temple-sites by the Egypt Exploration Fund in 1884-86, with the exception of some subsequent work by the British School in 1898-99. Most of the results are in the British Museum: see also p. 345 ff.

In the second season (1885-86) at Naukratis were found several interesting fragments of a B.F. white-ground ware, which from the nature of the designs has been connected with *Kyrene* (see Chapter VIII., p. 341). But so far no specimens of this ware

[1] *Amer. Journ. of Arch.* 1885, p. 18.

have been found in the latter place, nor indeed anything earlier than the end of the fifth century. It is to be hoped that the earlier cemeteries are yet to be discovered. Mr. George Dennis and others, however, explored a considerable tract of country in the Cyrenaica between 1856 and 1868,[1] and found many vases of late R.F. style, some of considerable merit; also several Panathenaic amphorae of the fourth century on which the old B.F. method of painting is preserved. These were found on the site of *Teucheira*, but most of the vases came from *Benghazi*, the ancient Euesperitis, more to the south-west, the ancient name of which, Berenike, came from the queen of Ptolemy Euergetes. Nearly all the vases found here are of the late fine R.F. period, corresponding to those of the Crimea; they are, however, mostly smaller and inferior in merit. The Panathenaic amphorae can be dated by the names of Athenian archons which appear upon them: Nikokrates, 333 B.C.; Hegesias, 324 B.C.; Kephisodoros, 323 B.C.; Archippos, 321 B.C.; and Theophrastos, 313 B.C. (see p. 390). They are of course importations from Athens. Among the R.F. vases is one representing a Persian king attacked by a lion; some have polychrome designs, in one case combined with reliefs (B.M. G 12). Most of the Cyrenaica vases are now in the British Museum and the Louvre.

IV. ITALY

With the mainland of Italy we include in our review the two islands of Sicily and Sardinia. The remaining area in which Greek pottery has been found on classical sites thus corresponds with the modern kingdom of Italy. Beyond its borders there is only one site, that of *Massilia* (Marseilles), which has produced Greek pottery. Vases of the primitive Thera style (see p. 261) were found here,[2] betokening a system of commerce between East and West in those times.

[1] See *Trans. Roy. Soc. of Lit.* 2nd Ser. ix. p. 165 ff., and *Arch. Zeit.* 1846, p. 216; also p. 36 above.

[2] *Bull. de Corr. Hell.* 1884, pl. 13; Froehner, *Ant. du Mus. de Marseilles*, 1928-30.

The vases found in Greece may be regarded as on the whole small in size and few in number, when compared with those discovered in the ancient cemeteries and on the sites of the old cities of Italy. These are indeed so numerous that (within certain limits) they might in themselves almost serve as a basis for the history of Greek vase-painting. Roughly speaking, the vases found in Italy fall into two geographical divisions.

FIG. 8. MAP OF ITALY.

The first division comprises the vases discovered in Etruria, which are found in every Etruscan city of importance, from Atria or Hadria at the mouth of the Po to the very gates of Rome itself. In particular, the tombs of Caere, Tarquinii, and above all Vulci, have yielded an immense number of vases.

The second is formed by the vases found in the southern

half of the peninsula, including the territories of Campania, Lucania, and Apulia, and the cities of Magna Graecia, such as Cumae, Locri and Tarentum. The establishment of the potter's art in these maritime cities at an early stage of Greek history helped to infuse a certain degree of civilisation into the regions of the interior, and its influence is to be seen in the pottery of the semi-barbarous populations, such as the Osco-Samnites and Iapygians. The chief sites for the discovery of vases are: in Apulia and Calabria, Ruvo, Canosa, and Tarentum; in Lucania, Anzi; in Campania, Capua and Nola.

We now proceed to describe in detail these sites and the discoveries of which they have been the scene. It is obvious that it will be found impossible to enumerate every spot in Italy where painted vases have been found, but it is hoped that no place or site of interest has been omitted. The order followed in describing these sites is a geographical one from north to south, which on the whole will be found the most convenient.

We accordingly begin with the northernmost spot to which the exportation of Greek vases seems to have reached—namely, Atria or *Hadria*, at the mouth of the Po. This place down to the time of Pliny[1] continued to manufacture drinking-cups of fine quality, celebrated for their durability, and painted vases have also been found in its tombs. They were first excavated as early as the sixteenth century; and in later excavations undertaken by the Austrian Government fragments of Greek pottery were found at some depth below remains of the Roman period.[2]

The cities of *Asti*, *Modena* (Mutina), and *Pollenza* (Pollentia) were also celebrated in Pliny's time for their cups, which he groups with those of Arretium under the heading of "Samian" ware[3]; specimens of this ware have been found in the two latter places.[4] Near Mantua a vase was discovered with the subject of Perseus and Andromeda[5]; and others at Gavolda on the Mincio.[6] At Genoa a fine R.F. krater was found in 1898.[7]

[1] *H.N.* xxxv. 161.

[2] See Jahn, *Vasens. zu München*, p. lxxxiv; *Arch. Zeit.* 1850, pl. 18=Reinach, i. 372; Micali, *Mon. Ined.* pl. 45, p. 279; and Schöne, *Mus. Bocchi*, 1878.

[3] *H.N.* xxxv. 160.

[4] See Chapter XXII., and Brongniart, *Traité*, i. p. 583.

[5] *Bull. dell' Inst.* 1848, p. 62.

[6] *Ibid.* 1847, p. 17.

[7] *Class. Review*, 1899, p. 329; *Röm. Mitth.* 1899, pl. 7.

Bologna has been the scene of discoveries sufficiently important to demand a separate paragraph. These were made by Signor Zannoni, in 1869-76, in the cloister of the Certosa convent, and a fully illustrated description was published by him at the conclusion of his labours.[1] The finds include, besides remarkable bronzes of the Villanova period of Italian civilisation (800—500 B.C.), a large number of B.F. and R.F. vases covering the whole period of exportations from Athens to Etruria (550—400 B.C.), and also some local imitations of B.F. fabrics. All these are now in the Museo Civico at Bologna.

Turning now to the important district of ETRURIA, which has been so prolific in discoveries of ancient vases, we come first to *Pisa*, where, in the beginning of the last century, a potter's establishment was discovered. Since that time red-figured vases both of the severe and fine styles have been found, including a hydria figured by Inghirami.[2]

At *Volterra* (Volaterrae) Jahn states that many painted vases have been found[3]; but the contents of the local museum are limited to inferior Etruscan pottery of the later period with yellow figures on black ground or staring heads painted in silhouette. On the other hand some of the plain black ware is remarkably good.[4]

Arezzo (Arretium) enjoyed in Pliny's time an even wider reputation than the places already mentioned, for its pottery of all kinds, not only cups[5]; its ware is also referred to by Martial and other authors. These allusions have been fully borne out by the extensive discoveries of potteries that have been made; the red glazed ware, stamped with the potter's name and with designs in relief, has been found in large quantities, and fully justified the substitution of the name Arretine for the old "Samian" in relation to the whole class. It is more fully dealt with in the section on Roman pottery (Chapter XXII.).

[1] *Scavi della Certosa di Bologna*, text and plates, 1876: see also *Bull. dell' Inst.* 1872, pp. 12 ff., 76 ff., 108 ff.

[2] See *Vasi Fitt.* iv. pl. 355, p. 82; *Bull. dell' Inst.* 1849, p. 23.

[3] P. lxxxiii.

[4] Dennis, *Cities and Cemeteries of Etruria*, ii. p. 189; Micali, *Mon. Ined.* p. 216.

[5] *H. N.* xxxv. 160: Retinet hanc nobilitatem (*sc.* of Samian ware) et Arretium in Italia.

Few Greek vases have been found here; but *Lucignano* in the neighbourhood is mentioned as a site where they have been discovered.[1]

Perugia was another important town of ancient Etruria, but does not appear to have been a centre either for the manufacture or importation of pottery. The museum, however, contains several good Greek vases with mythological subjects, and some Etruscan imitations of R.F. vases have also been found here.[2]

At *Chiusi* (Clusium), on the other hand, some very important discoveries have been made, including the magnificent krater of the Florence Museum, known as the "François Vase," after its discoverer.[3] It was found in a tomb which had been already pillaged, and was broken to pieces, but entire. Many vases of the B.F. and R.F. periods have been found, some signed with artists' names, including those of Pamphaios and Anakles. On the whole, this site has yielded more fine vases than any in Etruria, except Cervetri, and of course Vulci; it is also noteworthy for the early Etruscan black wares, of which there are many remarkable specimens in the Museum.[4] The Casuccini collection, which was very representative of Chiusi finds, has now been disposed of *en bloc* to the Museum at Palermo.[5]

In the immediate neighbourhood is *Sarteano*, also remarkable for the specimens of early black ware which it has yielded, but almost entirely deficient in painted vases. At *Roselle* (Rusellae) and *Orbetello* in the Maremma the finds of pottery have been of a comparatively insignificant character, the vases of Orbetello being nearly all late Etruscan fabrics, of rude forms, with coarse ill-drawn subjects. The same remark applies to *Toscanella*, near Vulci, where Greek vases are seldom found.

Bolsena (Volsinii) is specially distinguished by a curious class of late vases of coarse red ware with designs in relief, which show evident signs of having been coated with a solution

[1] Jahn, *Vasens.* p. lxxxii; Reinach, *Répertoire*, i. 163, 332; and see 166.

[2] Dennis, *Etruria*, ii. p. 431; Jahn, p. lxxxii; Reinach, *Répertoire*, i. 137, 161, 251, 384.

[3] See Plate XXVIII. and p. 370.

[4] See Dennis, ii. p. 307 ff.; Jahn, p. lxxix.

[5] Dennis, *ibid.*

producing the effect of silver.[1] They seem to be peculiar to this locality, though Athenaeus[2] tells us that a similar practice was in vogue at Naukratis. No other kinds of pottery have been found.

At *Orvieto* excavations were first made in 1830, but without very great results; the site was then neglected until the 'seventies, during which years Signor Mancini's excavations were so successful that a local Museum has been established, which now contains many good specimens of Greek vases, as well as Etruscan black wares.[3] At *Viterbo* various Greek vases, mostly black-figured, were found in the early 'twenties, and later on a kylix by the master Euphronios came to light.[4] *Bomarzo* has yielded some good Greek vases, including signed examples by Euphronios and Hieron.[5]

Corneto is more famous for the splendid wall-paintings of its tombs and for its coloured sarcophagi than for painted vases, but has nevertheless yielded some vases of considerable interest, notably a fine R.F. kylix with representation of the Olympian deities, signed by Oltos and Euxitheos, the beautiful kylix representing the desertion of Ariadne by Theseus,[6] and some specimens of Corinthian wares. Under its ancient name of Tarquinii it was of course famous as the spot to which Demaratos and his artist-companions were said to have fled from Corinth. Excavations were first begun in 1825-27. Besides the collection now in the public Museum,[7] there is a large one made by Count Bruschi from excavations on his own lands, the majority of the vases being of the B.F. period.[8] Not far distant are *Civita Vecchia*, represented only by some remarkable early vases in the British Museum,[9] Italian imitations of the Greek Dipylon ware, and La Tolfa, where Etruscan, Corinthian, and Ionic B.F. vases have been found.[10]

[1] *Brit. Mus. Cat. of Vases*, iv. p. 25, Nos. G 179-94: cf. *Class. Review*, 1897, p. 276, and *Ann. dell' Inst.* 1871, p. 5 ff.

[2] xi. 480 E.

[3] Dennis, *Etruria*, ii. p. 46. *Class. Review*, 1894, p. 277, gives some more recent finds.

[4] Hartwig, *Meistersch.* pl. 47, p. 466: cf. *Bull. dell' Inst.* 1830, p. 233.

[5] See Jahn, p. lxxviii.

[6] Reinach, i. 203, 222 (Plate XXXIX).

[7] See also *Class. Review*, 1893, pp. 84, 381; 1894, p. 277.

[8] Dennis, i. p. 405; Jahn, p. lxviii.

[9] B.M. A 469, 1537, 1540.

[10] *Jahrbuch*, 1889, pls. 5-6, p. 218.

Few finds, at least of Greek pottery, have been made at *Civita Castellana*, the ancient Falerii; but this town appears to have had a special manufacture of its own in the fourth or third century B.C., like all other Etruscan fabrics an imitation of Greek vases, but with certain strongly marked peculiarities of drawing and colouring. There is a fine specimen in the British Museum.[1] These vases have only been found in recent years. The British Museum also (among others) possesses an interesting collection of local early black and red wares from this site, including two large caldrons on open-work stands, with Gryphons' heads projecting. *Isola Farnese*, the ancient Veii, again, is more celebrated for its local fabrics than for Greek importations. Painted vases were found in 1838-39,[2] and in 1843 Campana discovered a remarkable tomb containing vases of early character without human figures, and early Italian wares. The archaic paintings of this tomb are of special interest for comparison with the vases of the period.[3]

Next to Vulci, which we have reserved for the last, by far the most important discoveries in Etruria are those made in the tombs of **Cervetri** (Caere), mostly of early fabrics. In 1836 the famous Regulini-Galassi tomb came to light, a passage-like structure sixty feet in length, with doorway of slabs sloping forward to form an arch; but it contained few vases. In the same year was found a remarkable vase of plain black ware, on which was engraved an early Greek alphabet, with a sort of syllabic primer.[4] Another tomb contained a series of slabs painted with archaic Etruscan figures in the style of early B.F. vases, which are now in the British Museum. Others of similar character are in the Louvre.[5] But though these large tombs yielded little painted pottery, yet Cervetri has been the site of many notable discoveries, chiefly of early B.F. vases illustrating various developments of vase-painting. The most important is formed by the series of hydriae

[1] F 479; also Reinach, i. 215. For a late R.F. vase with a Latin inscription from this site see *Röm. Mitth.* 1887, pl. 10, p. 231.

[2] Jahn, p. lxv.

[3] For an account of this tomb see Dennis, i. p. 33 ff., and above, p. 39.

[4] See Chapter XVIII., and Roberts, *Gk. Epigraphy*, i. p. 17.

[5] See for these Chapter XVIII.

named "Caeretan," after the site, which are fully discussed in Chapter VIII.; and among other finds we may note the Amphiaraos krater at Berlin,[1] of Corinthian style. Excavations went on for many years from 1831 onwards, and yielded also some interesting later vases, including examples with the signatures of Nikosthenes, Xenokles, Pamphaios, Euphronios,[2] and Charitaios, and the famous vase representing the oil-merchant.[3] Jahn[4] gives a list of the most important red-figured vases found here. At *Selva la Rocca*, near Monteroni in the same neighbourhood, the Duchessa di Sermoneta excavated a series of Greek painted vases of all periods. Other sites in Etruria on which vases have been found are Doganella,[5] Ferento near Viterbo,[6] Capannori,[7] Montepulciano,[8] Pitigliano,[9] Poggia Sommavilla on the border of the Sabine territory,[10] S. Filippo dei Neri, Tragliatella.[11]

But the discoveries made on all the other Etruscan sites combined are surpassed, both in number and interest, by those of **Vulci,** a name which eighty years since was scarcely known, but now represents to us one of the most important cities of antiquity. The site is represented by the modern Ponte della Badia, a district of about five miles in circumference round the bridge over the stream Fiora, between the estates of Canino and Montalto. The former estate lay on the left bank, distinguished by a hill named Cucumella.

The discovery of painted vases here was brought about purely by accident, about the year 1828. Some oxen in ploughing broke through into an Etruscan tomb containing two broken vases, and thus the local landlord, the Prince of Canino, was led to further researches. In the course of four months he discovered about 2,000 objects in tombs on one small plot of ground, and subsequently other explorers joined in emulating his good fortune. The number of painted vases

[1] *Cat.* 1655=Reinach, i. 199: see p. 319.
[2] The Antaios krater and the Petersburg psykter: see p. 431.
[3] Reinach, *Répertoire*, i. p. 106.
[4] P. lxvi ff.: see also generally Pottier, *Louvre Cat.* ii. p. 355 ff.
[5] B.M. E 41.
[6] *Notizie degli Scavi*, 1902, p. 84 ff.
[7] *Class. Review*, 1894, p. 277.
[8] Reinach, i. 320.
[9] *Class. Review*, 1897, p. 226.
[10] Jahn, p. lxiv; Reinach, i. 109, 368; *Class. Review*, 1897, p. 276.
[11] Reinach, i. 345.

alone discovered during the year 1829 is reckoned at over 3,000, according to the elaborate report published by Gerhard in the *Annali*,[1] describing and classifying the results. It would not be too much to assert that nine-tenths of the painted vases that have been brought to light in Etruria are from this site. Most of those now in the British Museum are from Camposcala, on the Montalto estate; but many are from the collections formed by Lucien Bonaparte, the Prince of Canino, who continued to excavate intermittently for many years, though the numbers of the finds materially diminished after the first great discovery.

In recent years the only important excavations on this site have been those conducted by M. Gsell on the estate of Musignano, at the expense of the proprietor, Prince Torlonia. The object was to exhaust the site by sporadic diggings over the three principal areas of Ponte della Badia, Polledrara, and Cucumella. In all 136 tombs were opened, ranging from the period of "well-tombs" (about the ninth or eighth century B.C.) down to the chamber-tombs of the early fifth century.[2] Besides local pottery of all kinds they contained imported Greek fabrics from the Geometrical ware down to the red-figure period. The later included Corinthian vases of various kinds, a good "Tyrrhenian" amphora, and one of the "affected" B.F. style, a cup signed by Tleson and one in the style of Epiktetos, and Etruscan imitations of B.F. fabrics.

M. Tyszkiewicz, the great collector, in his entertaining *Souvenirs*,[3] tells a curious story of the fate of one of the vases found in M. Gsell's excavations:—

"One day I received a visit from a country fellow, who said he had come from the neighbourhood of Canino, and brought with him a vase painted in the early Corinthian manner, the names of the figures being indicated by Greek inscriptions. The man declared he had discovered it in a tomb which had fallen in after heavy rains. The price asked was very reasonable, and the bargain was soon concluded. At that time M. van Branteghem . . . was one of the most eager buyers of Greek vases, and he was so envious of my acquisition

[1] 1831; see also *Bull. dell' Inst.* 1831, p. 161. A view of the site is given in *Mon. dell' Inst.* i. pl. 41.

[2] See generally Chapter XVIII. The finds are described in a work edited by Gsell, entitled *Fouilles de Vulci* (1891).

[3] Eng. transl. p. 112.

that I had real pleasure in giving it up to him. A little while after this, there called on me at my house a member of the French School in Rome, M. Gsell. . . . He began by asking me if I had not lately purchased a vase, which he closely described, and which proved to be the very one I had bought from the native of Canino. Now M. Gsell inspected so attentively the excavations under his care that it was impossible, he assured me, for the workmen to have stolen anything. All objects found were registered as soon as they were taken out of the tombs, and were locked up every evening in a warehouse. However, one day M. Gsell perceived that one had disappeared. He sent for the supposed thief (one of his superintendents), and by means of threats extracted a confession of the theft, and the name of the amateur to whom the vase had been sold. In conclusion, M. Gsell entreated me to let him have the vase. . . . Having parted with the vase, I felt the situation very embarrassing, but I told my interlocutor what had happened, and why I had handed the vase over to M. van Branteghem. The distress of M. Gsell on hearing this news touched me to such a degree that I ended by telling him that, knowing M. van Branteghem to be a gentleman, I would inform him he had become the owner of stolen goods, and throw myself on his mercy. The same day I wrote to the Belgian amateur and made a clean breast of the matter, and the vase was returned as quickly as possible. The vase was replaced in the museum of the Prince Torlonia at the Lungara.

"Years passed away, when one morning I was told that a peasant, who was waiting in the hall, desired to show me an antique work of art. This was an event of daily occurrence—indeed, it happened several times every day, and usually I found that the object for whose sake I had been disturbed was either quite uninteresting or else a fraud. But this time—astonishing fact!—I was shown the very vase that I had restored to the French School, and had afterwards seen at the Lungara Museum. Once again it had been stolen!"

The tombs in which the vases were found were mostly small grottoes hollowed in the tufa, and with a few exceptions only a few feet underground. There was nothing remarkable in them except the vases, for they were neither spacious nor decorated, nor finished with splendid ornaments like the tombs of Corneto and of Magna Graecia. Some had seats for holding the objects deposited with the dead; others pegs for hanging the vases on the walls. The wonder was to find such fine specimens of art in tombs so homely. These vases were of all styles and epochs

from early Corinthian of about the seventh century to the Decadence. Besides these, an immense number of vases painted black only, without any subject, and others of the black *bucchero* ware, were discovered in the various tombs, along with bronzes, ivories, and other objects peculiarly Etruscan.[1]

This vast discovery naturally attracted the attention of Europe. Notwithstanding the obvious fact of their possessing Greek inscriptions, and the light thrown upon them by the researches of Winckelmann, Lanzi, and other enlightened scholars, the Italian antiquaries, fired with a mistaken patriotism, insisted on claiming all the vases as Etruscan fabrics. The history of this error, long since discredited, is briefly summarised in the Introductory chapter.[2]

Turning now to Southern Italy, *Latium* need not detain us long. It is true that Greek vases have from time to time been found at Rome, or at any rate fragments, as in the recent excavations in the Forum[3]; but few of these are of importance except as historical data. When Rome is given as the provenance of a vase, it probably implies nothing more than that it has been acquired from some dealer in that city. At Civita Lavinia Lord Savile found some fragments of painted pottery of different periods. Alba Longa is famous as the site whence the hut-urns, elsewhere discussed, have been obtained; but on the whole Rome and the cities of Latium seem to be quite barren in regard to finds of pottery.

[1] Besides the already cited *Rapporto Volcente* of Gerhard in the *Annali* for 1831, an account of these discoveries will be found in the *Muséum Étrusque* of the Prince of Canino; *Trans. Royal Soc. of Lit.* ii. (1834), p. 76 ff. (Millingen); *Ann. dell' Inst.* 1829, p. 188 ff.; Jahn's *Einleitung*, p. lxviii; and an excellent description in Dennis's *Etruria*, 2nd edn. i. p. 448 ff.: see also Chapter XVIII. Above all, reference should be made to the recent summary by Gsell (see above).

[2] Those who are curious in such matters may be grateful for a bibliography of the controversy: Lanzi, *Dei Vasi antichi dipinti;* Winckelmann, *Hist. de l'Art*, i. p. 188 ff.; Canino, *Mus. Étr.* (1829), and *Cat. di scelte ant. Étr.; Annali*, 1831, p. 105 ff., 1834, p. 285; *Bull. dell' Inst.* 1829, pp. 60, 113 ff., 1831, p. 161 ff., 1832, p. 74 ff., 1833, p. 73 ff.; Gerhard, *Berl. ant. Bildw.* p. 143; *Journal de Savans*, 1830, pp. 115 ff., 177 ff.; Kramer, *Styl und Herkunft*, p. 146; Thiersch, *Hell. bemalte Vasen*, etc.

[3] Finds of "Proto-Corinthian," B.F., and R.F. fragments have been recently made in the precincts of the temple of Vesta (*Class. Review*, 1901, p. 93).

With the three main divisions of the southern half of Italy the case is quite different. It is true that there has been no Vulci in these districts, and indeed that no scientific excavations have taken place compared with those in Etruria; yet the yield of vases from these parts is extraordinarily large. In the eighteenth century the neighbourhood of Naples, Paestum, etc., was a favourite hunting-ground with dilettanti, such as Sir William Hamilton, who appear to have acquired their large collections chiefly from Campanian tombs; but unfortunately they have left no record of the sites on which these vases were found. In the Samnite district and north of the Apennines pottery-finds are almost unknown; while the barbaric regions of Bruttii and Calabria are only represented by a few late painted vases of the rudest local fabrics.

It may be noted that as a general rule the Greek colonies on the coast, which maintained from the earliest times a constant intercourse with Greece, have yielded from their tombs a fair proportion of the older Greek fabrics, whereas the inland cities are more remarkable for their remains of the later Athenian and local wares, being of more recent origin.

Beginning with Campania, we take first the famous colony of *Cumae*, the most ancient in Magna Graecia, which was founded by the Chalcidians of Kyme in Aeolis at an unknown date, but not later than the eighth century. Vases of all periods have been found here, though not in great numbers. The earliest belong to the infancy of the colony, and include the famous lekythos of Tataie found in 1843, and now in the British Museum.[1] It bears an inscription in the Chalcidian alphabet. But the majority of the finds belong to the period when there appears to have been a flourishing local fabric, about the third century B.C. They are the most typical representatives of the Campanian style, and may be studied to best advantage in the Raccolta Cumana of the Naples Museum, where they are collected together.[2] Many of these were found in 1842. Cumae was famous for its pottery even in Roman times,[3] and specimens

[1] A 1054 = *Bull. Arch. Nap.* ii. pl. 1, 1-2.

[2] See p. 483, and Patroni, *Ceramica Antica*, p. 79 ff.

[3] Mart. *Ep.* xiv. 114; Stat. *Silv.* iv. 9, 43.

of Roman ware with reliefs have been found here, as also at the neighbouring Puteoli (Chapter XXII.).

Next in importance for the history of local fabrics are the vases found at *S. Agata dei Goti*, the ancient Saticula, which can also claim a manufacture of its own.[1] They are for the most part bell-shaped kraters, and were chiefly excavated at the end of the eighteenth century. Signed vases by the Paestum masters Assteas and Python (see below) came from this site. The vases of *Abella* form another class of Campanian ware, but of a degenerate and late type, mostly hydriae of very pale clay. Other sites which have yielded Campanian vases are: Naples (Neapolis), Telese, Teano, Acerra, Sessa, and Nuceria Alfaterna (Nocera).[2]

Capua, on the other hand, does not appear to have had any special fabric of its own, although the finds of all periods are as numerous as from any site in Southern Italy except Ruvo and Nola. Among the earlier specimens may be mentioned the inscribed Corinthian krater in the British Museum (B 37) from the Hamilton collection (Plate XXI.). The red-figured vases include cups signed by Euergides, Epiktetos, and Pistoxenos. The vases of the Decadence have, as indicated, no distinctive features of their own. Most of the late red-figured vases of fancy shapes (such as rhyta) in the British Museum are from this site, whence they passed into the hands of Castellani. The black vases with gilded ornamentation, of which the British Museum possesses some fine specimens, are also characteristic of Capua. A large number of the vases obtained by Sir William Temple are from this site, as is also one of the later Panathenaic amphorae.[3]

At *Calvi* (Cales) Greek painted vases are almost unrepresented,[4] but this site is distinguished as the origin of two late varieties of fictile ware. One is formed by the Calene phialae (p. 502), or bowls of black ware with interior designs in relief, sometimes signed with the names of local potters; the other

[1] See Patroni, *op. cit.* p. 93, also Jahn, *op. cit.* p. lxii, for B.F. and other vases found here. Some of the vases are direct imitations of Athenian fabrics.

[2] Naples 3352-55.

[3] B.M. B 610.

[4] See Jahn, p. lxiii; Reinach, *Répertoire*, i. 317.

consists of large vases highly ornamented with terracotta figurines attached in different places, or else modelled in the form of female figures or heads. Strictly speaking, the latter must be classed under the heading of terracottas (see p. 119).

Lastly, we have to speak of *Nola*, which, like Capua, was always a city of considerable importance, and is represented by a large series of vases of all periods.[1] Here again we can detect no signs of a special local fabric, though for a long time the so-called "Nolan" amphorae of the red-figured period were thought to have been made on the spot, so frequently have they been found. The name is still retained as convenient for describing this particular form of amphora (see p. 162), with its exquisite black varnish, graceful outlines, and simple yet effective decoration; but it is, of course, quite conventional. The vases are purely Attic (some are signed by Athenian artists), and it can only be supposed that they found especial favour in the Nolan market. Corinthian and Attic black-figured vases occur in large numbers, and both here and at Capua there seems to have been a tendency to imitate the exported Athenian wares. Thus we find not only vases with black figures on buff ground on which the drawing is obviously free and developed, but also imitations of the "Nolan" amphorae, both classes dating from about the fourth century B.C.

At *Sorrento* and the neighbouring Vico Equense a few vases of different periods have been found, including a fine R.F. krater signed by Polygnotos, which was discovered in 1893, and is now in the British Museum.[2] Salerno is also mentioned as a site where Greek vases have come to light.

The famous city of *Paestum* lay actually within the borders of Lucania, but all its relations were with Campania, and it may practically be regarded as a Campanian city. Little has been found here except local fourth- and third-century fabrics, but these are for the most part so remarkable that they have established the existence of a school of vase-painting at Paestum quite distinct from and earlier than the fabrics of

[1] See Jahn, p. lii. Those in the British Museum from Nola came chiefly from the Blacas collection.

[2] See also Reinach, *Répertoire*, i. 228, 348; *Branteghem Sale Cat.* Nos. 84-5; and Jahn, p. li.

the three districts of Southern Italy.[1] Nearly all the vases found here (including three signed by the master Assteas) have the distinguishing characteristics of this class. They are mostly to be seen in the Naples Museum; a fuller account of them is given in Chapter XI.

Among the sites in Lucania on which vases have been found,[2] the most important is *Anzi*, the ancient Anxia, which appears to have been the chief centre for the manufacture of the Lucanian vases. Earlier examples of Greek red-figured vases have also come from this site, but the majority are of the Lucanian class.[3] Provenances in this district are, however, always doubtful, and in many cases nothing more definite than "Basilicata" can be ascertained. But discoveries on the following sites seem to be well attested: Armento,[4] Eboli,[5] Missanello, Grumento, Potenza,[6] Pomarico, and Pisticci.[7] The British Museum collection includes a fine B.F. krater (B 360) from Armento, the famous vase with the Doloneia (F 157 = Fig. 130) from Pisticci, several from Anzi, and a few from Pomarico. In the Naples Museum are vases from Pomarico, Pisticci, and elsewhere (chiefly in the Santangelo collection), while the Koller collection, now in the Berlin Museum, contains many from Castelluccio, S. Arcangelo, and other sites. But none of these finds compare in any sense with those of Apulia and Campania. There were no ancient cities of special importance in this region, and hence no large cemeteries, while the local fabric was probably not of long duration.

In Apulia the site above all others important is that of *Ruvo*, which was no doubt the chief centre of the local pottery-manufactures, and has yielded a great majority of the vases known as "Apulian," as well as many of earlier style. Excavations began here in the eighteenth century, but it was not until 1828 that they were undertaken on any large scale. Vases

[1] Walters, *B.M. Cat. of Vases*, iv. p. 16; Patroni, *Ceram. Ant.* pp. 37, 76.

[2] See Jahn, p. xlvi ff.

[3] *E.g.* Petersburg 355, and others in B.M.

[4] Petersburg 1187, 1427; Naples 2991, S.A. 11, 708-9.

[5] See Jahn, p. l, for examples from this site, mostly of inferior merit; also Reinach, i. 250.

[6] Berlin 2694; *Bull. dell' Inst.* 1830, p. 21.

[7] B.M. F157; Bibl. Nat. 422.

are still found from time to time at the present day, and one of the largest private collections still existing, that of Signor Jatta, is extraordinarily rich in the vases of Apulian style collected by this gentleman and preserved on the spot. It is curious that Ruvo (Rubi) had no special importance in antiquity; it may, however, be worth noting that remains of a pottery with furnaces, etc., have come to light.[1] The Apulian vases from Ruvo have no special characteristics which distinguish them from the other Apulian fabrics.

It would be futile to attempt a detailed description of the finds at Ruvo,[2] which include such a large proportion of the magnificent Apulian vases covered with paintings of an elaborate nature. Of earlier specimens, an isolated Corinthian vase, two Panathenaic amphorae, and sundry other B.F. vases are known, as also occasional R.F. vases, but these are almost exceptions. Among the most famous Apulian vases are those representing the Death of Talos, the Death of Archemoros, preparations for a Satyric Drama, and so on.[3]

More important in antiquity, though less productive in vases, is *Canosa*, the ancient Canusium, where a set of fine vases was first discovered in 1813 and published by Millin. Among the best of these is the great Dareios vase at Naples (see Chapter XIV. *ad fin.*). Nearly all are of the Apulian class, with preferences for certain forms and details (such as the use of purple) not appearing at Ruvo, and a typical local product is a kind of *prochoös* or tall jug.[4] Canosa was also a centre for the large terracotta vases which have been also found at Calvi (see p. 119).

At *Bari* vases have been found from time to time, and there is a fair collection in the local museum[5]; they include the famous Poniatowski vase with Triptolemos' setting-out, now in the Vatican, and the krater in the British Museum (F 269) with the burlesque combat of Ares and Hephaistos over Hera. *Ceglie* has chiefly supplied the Berlin Museum with its Apulian specimens (from the Koller collection), others passing into

[1] Lenormant, *Grande Grèce*, i. p. 94.

[2] See Jahn, p. xl.

[3] For recent excavations see *Class. Review*, 1893, p. 381; 1894, p. 129 (vases with subjects of Kanake and Theseus with the ring).

[4] Patroni, *Ceram. Ant.* p. 142; B.M. F 237-38.

[5] Cf. also Petersburg 778, 895.

a private collection at Naples. They are mostly of the later over-elaborated style.

Altemura has supplied a few, but chiefly fine, vases, including the R.F. krater with the birth of Pandora (Brit. Mus. E 467) and the magnificent vase representing the Under-world found in 1847 and now in Naples. Other finds have been made at *Polignano*, *Putignano*, and *Fasano* (Gnatia), which last site is interesting as the probable centre of a late fabric. Most of the vases found here have figures or patterns painted in opaque white and purple on the black glaze, and represent the latest stage of vase-painting in Southern Italy.[1] They are found almost exclusively on this site. It is also represented by some late R.F. vases with polychrome decoration.

In the region covered by the "heel" of Italy the most important site, as also the most important city in ancient times, is *Taranto* or Tarentum. Chiefly on the authority of M. Lenormant,[2] this city was for a long time regarded as the centre of many South Italian fabrics, including the vases with burlesque scenes (φλύακες), those of Paestum, the Fasano ware, and, in fact, all Apulian fabrics. But the extensive excavations that have taken place at Tarentum of late years have shown that Lenormant and those who followed him were quite misled. Few Apulian vases have come to light, the Paestum fabric is unrepresented, and although the φλύακες of Tarentum were no doubt specially famous in antiquity, there is no authority for connecting this class of vases with them to the exclusion of other sites. Vases, in fact, are extremely rare at Tarentum, which made a much greater speciality of terracottas, especially of a votive kind; a few B.F. and R.F. specimens are known,[3] including the remarkable fragment of a R.F. krater in the British Museum (E 494), and a fine krater with an Amazonomachia (Bibl. Nat. 421).

Vases from *Metapontum* also are few and far between; the

[1] See p. 488, and B.M. F 543 ff.; for earlier vases, Reinach, i. pp. 471-77.

[2] *La Grande Grèce*, i. p. 92 ff.

[3] See *Class. Review*, 1898, p. 185, for mention of two B.F. kylikes signed by Antidoros; also *Notizie degli Scavi*, 1903, p. 34 ff., 205 ff., for other interesting B.F. vases, including signatures of Tleson, Sakonides, and Thrax. The two latter were found at Leporano, about ten miles S.W. of Tarentum.

British Museum possesses a specimen with figures in relief on black ground; and finds are also reported from *Lecce*, *Brindisi*, and *Oria*.[1] Many examples of local fabrics, described in Chapter XVIII., have been found in this district, and specimens are preserved in the museums at Bari, Lecce, and elsewhere. Lastly we have to speak of the finds made at *Locri* on the east side of the "toe" of Italy, the only important site in that district which has yielded Greek vases. Many of these are white lekythi with figures in outline and polychrome, resembling the well-known Athenian fabrics. They were originally (like those of Gela) thought to be local products, but it is more likely that they were made at Athens and imported, the Locrians having a particular preference for these vases, as the people of Nola had for the slim amphorae. Some of the B.F. and R.F. vases found here are of a very fair order of merit.[2]

Sicily, so celebrated for its magnificent works of art, has yielded a considerable number of painted vases of all periods. The cities of the southern coast have produced the greatest number, especially Syracuse, Gela (Terranuova), and Agrigentum (Girgenti). Many have also come from the cemeteries of Acrae, Leontini, and Megara Hyblaea. Palermo, Messina, and Catania have produced isolated examples. The richest finds have been in the recently excavated cemeteries of *Syracuse*. The discoveries of early vases and fragments made here by Dr. Orsi are of the utmost importance, and include quantities of specimens of Mycenaean and "Proto-Corinthian" wares.[3]

At *Terranuova* or Gela, one of the earliest settlements of the island, vases with black and with red figures were found as long ago as the eighteenth century,[4] and in 1792 a pottery with furnaces and vases was discovered in the neighbourhood.[5]

[1] Mycenaean vases from this site are in the Louvre (Furtwaengler and Loeschcke, *Myken. Vasen*, p. 48).

[2] As for instance Munich 781 = Reinach, ii. 126.

[3] These discoveries are summarised in the *Class. Review*, 1894, p. 278; 1896, p. 173; 1898, p. 428. Fuller details are given in the *Notizie degli Scavi* for those years. See also Furtwaengler and Loeschcke, p. 47.

[4] Jahn, p. xxxi.

[5] *Arch.-Intell. Blatt*, 1836, No. 34, p. 283.

Of late years vases with black and red figures, some of the latter being of the finest style, have been discovered in large numbers, as well as white lekythi, probably imported from Athens. Of these finds we have already given some description (p. 37). In 1862 Mr. George Dennis found a series of fine R.F. lekythi of the "severe" period, together with B.F. vases and archaic terracottas, now in the British Museum; and these have been fully rivalled by Mr. Arthur Evans' discoveries in later years. The site has also yielded vases of a primitive character, imitating early Greek wares. Gela was always noted for its potteries, as the ceramic decorations of the Geloan Treasury at Olympia show (p. 100); many of the vases have characteristic Sicilian subjects, and there was undoubtedly a considerable local fabric.

Of the vases found at *Girgenti* (Agrigentum) the most noteworthy is the beautiful lebes now in the British Museum,[1] of the finest R.F. style, described as "one of the finest specimens of Greek ceramography that has come down to us, absolutely unsurpassed in its combination of artistic merit and mythological interest." It was found in 1830, and belonged to the poet Samuel Rogers; the subject is the combat of Theseus with the Amazons. Other B.F. and R.F. vases of fine style have come from this site,[2] as well as a series of moulds for vases with reliefs, of the Hellenistic period.[3] Fine vases are said to have been found at *Kamarina*,[4] a few with red figures at *Himera*, and some archaic lekythi at *Selinus*.[5] From *Lentini* Jahn records polychrome and R.F. vases, the latter of the "strong" and later periods.[6] At *Palazzolo* (Acrae) B.F. and R.F. vases have been found, including a B.F. kotyle in the British Museum (B 79), representing Dionysos in a car formed like a ship. At *Centorbi* (Centuripae) almost the only find of

[1] Gerhard, *Auserl. Vasenb.* 329-30; *Forman Sale Cat.* No. 357.

[2] Millin-Reinach, ii. 61-2 (Taleides); *Mon. dell' Inst.* i. pl. 52; B.M. B 295 (Nikosthenes); B.M. E 474, E 478: cf. Jahn, p. xxxii, and the index to Reinach's *Répertoire, s.v.* Agrigente.

[3] *Röm. Mitth.* 1897, p. 261 ff.

[4] Jahn, p. xxxi.

[5] *Arch.-Intell. Blatt*, 1834, No. 56, p. 457 ff.: see also *Bull. della Comm. di Antich. in Sicilia*, 1872, p. 13 ff. pls. 4-5.

[6] P. xxxi. One of the late vases with burlesque scenes (*Mon. dell' Inst.* iv. pl. 12) was also found here.

note was a conical cover of a large bowl ornamented with encaustic paintings, the colours having been prepared with wax; parts of two bowls were also found decorated with designs in relief and gilt, of scrolls, small Cupids, and heads of Medusa.[1] Other sites that may be mentioned are: Hybla Heraea (Ragusa),[2] Catania, Alicata,[3] Aderno[4] at the foot of Etna, and Monte Saraceno.[5]

At Tharros, in *Sardinia*, extensive excavations were made in 1856, and a long series of tombs found containing Phoenician objects in porcelain, engraved scarabs, terracotta figures, and other objects, but little painted Greek pottery of any importance.[6] An interesting krater of late date, with the head of the Satyr Akratos, from the island of *Lipari* is now in the collection of Mr. J. Stevenson at Glasgow[7]; and in *Ischia* was found a krater with the subject of the infant Dionysos confided to the Nymphs.[8] In the public museum of *Malta* some Greek vases are to be seen,[9] but it is not known whether they were actually found there.

We have now completed the circuit of the ancient world, so far as finds of Greek pottery are concerned, as with the exception of Marseilles, already alluded to none can be traced in Spain or Central Europe.

[1] See *B.M. Cat. of Terracottas*, D 1-2; *Röm. Mitth.* 1897, p. 262.
[2] *Class. Review*, 1893, p. 231.
[3] Jahn, p. xxxii.
[4] *Ibid.* p. xxx.
[5] Reinach, i. 408.
[6] A B.F. vase in the Cagliari Museum is published in *Bull. Arch. Nap.* N.S. iv. pl. 13.
[7] *J.H.S.* vii. pl. 62, p. 55.
[8] *Bull. dell' Inst.* 1842, p. 10.
[9] Jahn, p. xxix.

CHAPTER III

THE USES OF CLAY

Technical terms—Sun-dried clay and unburnt bricks—Use of these in Greece—Methods of manufacture—Roof-tiles and architectural decorations in terracotta—Antefixal ornaments—Sicilian and Italian systems—Inscribed tiles—Sarcophagi—Braziers—Moulds—Greek lamps—Sculpture in terracotta—Origin of art—Large statues in terracotta—Statuettes—Processes of manufacture—Moulding—Colouring—Vases with plastic decoration—Reliefs—Toys—Types and uses of statuettes—Porcelain and enamelled wares—Hellenistic and Roman enamelled fabrics.

WE now proceed to treat the subject of the fictile art among the Greeks in its technical aspects, prefacing our study with a section dealing with the uses of clay in general.

The term employed by the Greeks for pottery is *κέραμος*, or for the material *γῆ κεραμική*. The word for clay in a general sense is *πηλός*, while *κέραμος* has the more restricted sense of clay as material for fictile objects; the latter word is supposed to be connected with *κεράννυμι*, to mix. They likewise applied to pottery the term *ὄστρακον*, meaning literally an oyster-shell, and *ὀστράκινα τορεύματα*[1] is also an expression found for works in terracotta. Nor must we omit to mention that *πηλός* too comes to bear a restricted sense, when it is applied to the unburnt or sun-dried bricks freely employed in early architecture. Keramos was regarded by the Greeks as a legendary hero, from whom the name of the district in Athens known as the Kerameikos, or potter's quarter, was derived.[2] The word *κέραμος* soon became generic, and as early as Homer's time we find such an expression as *χάλκεος κέραμος* for a bronze vessel[3]; similarly it came to be used for tiles, even when they were of marble (see below, p. 100).

[1] Strabo, viii. p. 381 (the expression should probably be confined to vases with reliefs).

[2] Paus. i. 3, 1; Harpokration, *s.v.* *κεραμεῖς*.

[3] *Il.* v. 387.

The art of working in clay may be considered among the Greeks, as among all other nations, under three heads, according to the nature of the processes employed: (1) Sun-dried clay (Gk. *πηλινά* or *ὠμά*, Lat. *cruda*); (2) baked clay without a glaze, or terracotta (Gk. *γῆ ὀπτή*); (3) baked clay with the addition of a glaze, corresponding to the modern porcelain. It is then possible to treat of the uses of clay under these three heads. The first, from its limited use, will occupy our attention but very briefly; the second, the manufacture of building materials and terracotta figures, only technically comes under the heading of pottery, and will therefore also receive comparatively brief mention. It remains, then, that in the succeeding chapters, as in the preceding, it will be almost exclusively with the third heading that we are concerned. Before, however, dealing with this third heading, or pottery, we may review briefly the purposes for which clay was worked, under the other two headings of brick and terracotta.

The uses of clay among the Greeks were very varied and extensive. Sun-dried clay was used for building material, and we have already seen what an important part was played by pottery in their domestic and religious life. The uses of terracotta are almost more manifold than those of pottery. It supplied the most important parts both of public and private buildings, such as bricks, roof-tiles, drain-tiles, and various architectural adornments; and was frequently used in the construction and decoration of tombs and coffins. Among its adaptations for religious purposes may be noted its use as a substitute for more expensive materials in the statues of deities, as well as the countless figurines or statuettes in this material, many of which have been found on the sites of temples or in private shrines; and besides the statuettes and other figures, of which such quantities have been found in tombs, it was used for imitations of jewellery or metal vases made solely for a sepulchral purpose. It also supplied many of the wants of every-day life, in the form of spindle-whorls, theatre-tickets, lamps and braziers, and culinary and domestic utensils of all kinds, taking the place of the earthenware of modern times. It supplied the potter with moulds for his figures and the sculptor with models for his work

in marble or bronze, and placed works of art within the reach of those who found marble and the precious metals beyond their means.

One of the most elementary uses of clay is for the manufacture of building material, for which it plays an important part, as we have already seen, in the history of the Semitic races. Both burnt and unburnt bricks were employed in Egypt and Mesopotamia, and their use has already been referred to in the Introduction. Vitruvius[1] speaks of the use of brick in the palace of Kroisos at Sardis, and we also read of the walls of Babylon and Larissa (on the site of Nineveh) as being of brick.[2] Generally speaking, sun-dried bricks belong to an earlier period of development than baked bricks; at any rate, this is the case in the buildings of Greece and Rome.

In Greece itself the antiquity of brick is implied by the words of Pliny,[3] who tells us that Hyperbius and Euryalus of Athens "were the first to" construct brick-kilns (*laterarias*) and houses; before their time men lived in caves. He further goes on to say that Gellius regarded one Toxius as the inventor of buildings of sun-dried clay, inspired by the construction of swallows' nests. The reference is obviously to the employment by swallows of straw and twigs to make the clay for their nests cohere; this may well have suggested, in the first instance, the principle of mixing straw with sun-dried clay bricks, as was done by the Israelites in their bondage in Egypt. The method is one still practised in the East, where in such countries as Palestine and Cyprus whole villages built in this fashion may be seen.

There is no doubt, however, that in Greece, with its stores of marble and stone for building, brick never became general, though it was probably more used in sun-dried form in earlier buildings before the Greeks had begun to realise the possibilities of stone buildings. Pausanias[4] speaks of temples of Demeter

[1] ii. 8, 10.

[2] Hdt. i. 179; Xen. *Anab.* iii. 4, 7. Cf. Ovid, *Met.* iv. 57:

"ubi dicitur altam
Coctilibus muris cinxisse Semiramis urbem."

[3] *H.N.* vii. 194.

[4] v. 5, 4; x. 35, 5 and 4, 3; ii. 27, 7 (ὠμῆς τῆς πλίνθου: see Frazer's note *ad loc.*); Nissen, *Pompeian. Studien*, p. 24.

at Lepreon in Arcadia and Stiris in Phokis, of a shrine of Asklepios at Panopeus in Phokis, and of the Stoa of Kotys at Epidauros (restored by Antoninus Pius) as being of unburnt brick (πηλός). Of the same material was the cella of a temple at Patrae[1]; but the walls of various cities, such as Mantinea, were of burnt brick.[2]

Nor was the use of sun-dried clay confined to building material. It seems also to have been employed for modelling decorations of public buildings. Thus Pausanias mentions "images of clay," representing Dionysos feasting in the house of Amphiktyon, adorning a chamber in the temenos of that god in the Kerameikos,[3] and it seems highly probable that these are to be identified with the *cruda opera* of one Chalcosthenes or Caicosthenes mentioned by Pliny,[4] where the word *cruda* can only be used in a technical sense (Greek ὠμά). He also mentions at Tritaea in Achaia[5] statues of the Θεοὶ μέγιστοι in clay, and at Megara an image of Zeus by Theokosmos,[6] of which the face was gold and ivory, the rest clay and gypsum.

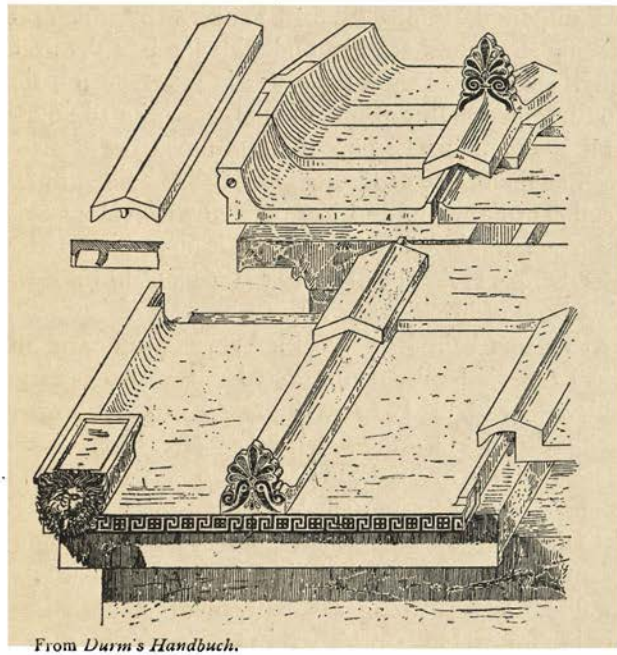
Our knowledge of the use of brick (both burnt and unburnt) and terracotta in Greek architecture has been largely increased, not to say revolutionised, by recent discoveries in all parts of the Greek world, and going back to a very remote period.

Recent excavations have yielded walls of unburnt brick at Eleusis, Mycenae, Olympia, Tegea, and Tiryns.[7] The Heraion at Olympia, which dates from the tenth century B.C., is a peripteral temple with stone stylobate, pillars and *antae* of wood, and cella-wall of unburnt brick. In this respect it resembles the temple of Zeus and Herakles at Patrae (see above). It also possesses the oldest known example of a terracotta roof (Fig. 9). A recently discovered temple at Thermon in Acarnania is constructed of wood and terracotta, with painted terracotta slabs in wooden frames for metopes; the style of the paintings

[1] Vitr. ii. 8, 9.
[2] Xen. *Hell.* v. 2, 5; Paus. viii. 8, 5.
[3] ἀγάλματα ἐκ πηλοῦ, i. 2, 5.
[4] xxxv. 155; see Milchhoefer in *Arch. Stud. H. Brunn dargebr.* p. 50.
[5] vii. 22, 6.
[6] i. 40, 4.
[7] See on the subject generally Dörpfeld and others, *Die Verwendung von Terrakotten*, Berlin, 1881.

appears to be Corinthian, and they form a valuable contribution to the history of early Greek painting.[1]

The stone stylobate at the Heraion was a necessity because of the destructive effect of the moist earth on terracotta; it consisted of a row of vertical slabs on which the bricks were placed in regular courses. We may see in this method of construction the forerunner of the system, universal since that time, of building walls on a plinth, which survives even to the



From *Durm's Handbuch.*

FIG. 9. DIAGRAM OF ROOF-TILING, HERAION, OLYMPIA.

present day. In the same way door-jambs and lintels, which were of necessity made of wood, not of brick, continued to be constructed in that material even after the introduction of stone.[2]

[1] *Ath. Mitth.* xxiv. (1899), p. 350; Ἐφ. Ἀρχ. 1903, pls. 2-6, p. 71 ff. Cf. the painted terracotta panels in wooden frames at Sparta, mentioned by Vitruvius (ii. 8, 9).

[2] See a passage in Xenophon (*Mem.* iii. 1, 7) bearing on the different materials used in Greek domestic architecture.

It has been assumed by some authorities that the Doric style of architecture is derived from a wooden prototype; this, however true of the Ionic style, is not altogether true of Doric. The proportions of the latter are too heavy. A more probable explanation is that it is the combination of wood with sun-dried tiles or bricks which we see in the Heraion that developed with the introduction of stone into the Doric system.[1]

It is then clear that although in Greece bricks were by no means indispensable for building temples, houses, and walls, and though stone and marble undoubtedly had the preference, especially in later times, yet their use is more general than was hitherto supposed. But when they are mentioned by classical authors it is generally when speaking of foreign or barbarian edifices, such as the palace of Kroisos at Sardis or the monument of Hephaestion at Babylon,[2] and in a manner which shows that they were not much employed in Greece at the time when they wrote. The older temple of Apollo at Megara is described by Pausanias[3] as having been of brick (πλίνθος), but we are left in doubt as to whether this was baked or sun-dried; while the excavations at Olympia have distinctly contradicted his statement[4] that the Philippeion was of brick, as it is proved to have been built of stone ashlar.[5] In 333—329 B.C. the Long Walls of Athens were constructed, partly in brick, under Habron, son of Lykourgos, with Laconian tiles for the roofs.[6] Other recorded buildings are all of late date and under Roman influence, and we must leave an account of Roman brick-building to be dealt with in a later chapter (XIX.).

There is an interesting passage in the *Birds* of Aristophanes, in which he is describing the building of the city of Nephelokokkygia, the walls of which are apparently conceived as being of sun-dried brick. He there speaks of "Egyptian brick-bearers,"[7] implying that the use of brick was a characteristic distinction of that nation. The passage (1133-51) is

[1] See Dörpfeld, *Die antike Ziegelbau u. sein Einfluss auf d. dor. Styl*, in *Hist. u. Phil. Aufsätze E. Curtius gewidmet*, p. 139 ff.

[2] Diod. Sic. xvii. 115.

[3] i. 42, 5.

[4] v. 20, 5.

[5] Blümner, *Technologie*, ii. p. 11; *Olympia* (*Ergebnisse*), ii. p. 129 ff.

[6] *Inscr. Gr.* (*Atticae*), ii. 167.

[7] Αἰγύπτιος πλινθοφόρος (l. 1133).

worth quoting in full, as showing the process employed in the making of sun-dried bricks.

Mess. Birds and none else; no bricklayer of Egypt,
No stone-hewer was there, no carpenter:
With their own hands they did it, to my marvel.
There came from Libya thirty thousand cranes,
All having swallowed down foundation-stones,
Which with their beaks the rails still aptly shaped:
Another party of ten thousand storks
Were brick-makers: and water from below
The plovers and the other wading birds
Were raising up into the higher air.
Peisth. And who conveyed the mortar[1] for them?
Mess. Herons,
In hods (λεκάναισιν).
Peisth. And how did they get in the mortar?
Mess. That was the cleverest device of all, sir.
The geese with their webbed feet, as though with spades (ἄμαις),
Dipp'd down, and laid it neatly on the hods.
Peisth. What feat indeed may not be wrought with feet?
Mess. Aye, and the ducks, by Jove, all tightly girt,
Kept carrying bricks, and other birds were flying,
With trowel on their head, to lay the bricks;
And then, like children sucking lollipops,
The swallows minced the mortar in their mouths.
(Kennedy's Trans.)

Sun-dried bricks were known as πλίνθοι ὠμαί (*lateres crudi*); baked bricks as πλίνθοι ὀπταί (*lateres cocti* or *coctiles*). The Romans also used the word *testa* for baked brick, corresponding to the Greek κέραμος. Vitruvius[2] distinguishes three varieties of unburnt bricks, as used by the Greeks. One, known as "Lydian," was also used by the Romans, who named the bricks from their length *sesquipedales*; their size was 1½ by 1 ft. The other two, exclusively Greek, were known as πεντάδωρον and τετράδωρον, the word δῶρον signifying a "palm"

[1] An obviously incorrect rendering of πηλός; the process of making sun-dried bricks is certainly here referred to, as the allusion to Αἰγύπτιοι πλινθοφόροι implies.

[2] ii. 3, 3.

or three inches; in other words, they were respectively fifteen inches and one foot square. The former was used for public buildings, the latter for private houses, and they were arranged in the walls in courses of alternate whole and half bricks, as is frequently done at the present day. Vitruvius also speaks of bricks made at Pitane in Mysia, and in Spain, which, were so light that they would float in water.[1] He advises that bricks should not be made of sandy or pebbly clay, which makes them heavy and prevents the straw from cohering, so that they fall to pieces after wet. Many other directions are given by him,[2] but are too lengthy to quote here. Bricks were made in a mould called *πλαίσιον*, a rectangular framework of boards[3]; and the sun-dried bricks were, as we learn from the passage quoted above, made by collecting the clay with shovels (*ἄμαι*) into troughs (*λεκάναι*) and working it with the feet.[4] It is probable that we have some allusion to the use of moulds in certain passages from the Latin writers.[5] The final proceeding was the drying in the sun.

An important branch of the subject is the use of terracotta for roof-tiles and other architectural decorations of temples and other buildings. On this point our knowledge has during the last five-and-twenty years been marvellously increased, the extent of its use in architecture having been hitherto but little suspected.[6] The generic term for a roof-tile is in Greek *κέραμος*; they are generally divided into flat tiles (*στεγαστῆρες* or *σωλῆνες*, *tegulae*) and covering-tiles (*καλυπτῆρες*, *imbrices*). Besides the ordinary roof-tiles there must also be taken into consideration four varieties of ornamental tiles which found their place on a classical building. They are: (1) the covering-slabs arranged in a row along the *γεῖσον*, or raking cornice of the pediment;

[1] ii. 2, 4.

[2] ii. 2, 1, 2. For further details see Chapter XIX.

[3] Ar. *Ran.* 800, quoted by Pollux, x. 148: cf. Plut. *Vit. Sol.* 25.

[4] For representations of this process in Egyptian wall-paintings see Rosellini, *Mon. Civili*, ii. p. 255, pl. 49, 1, and Wilkinson, *Manners and Customs*, i. p. 344.

[5] Isid. *Orig.* xix. 10, 16: *lateres . . . inde nominati sunt quod lati ligneis formis efficiuntur.* Cf. *ibid.* xv. 8, 16.

[6] See on the subject generally, Dörpfeld, *Die Verwendung von Terrakotten*, 1881, and Borrmann's excellent treatise in Durm's *Handbuch d. Architektur*, *Die Keramik in d. Baukunst* (1. Theil, Bd. 4), p. 28 ff.; also Wiegand, *Puteol. Bauinschr.* pp. 719, 756 ff.

(2) the *κυμάτιον* or cornice above the *γεῖσον*; (3) the cornice along the sides of the building, with spouts in the form of lions' heads, to carry off rain-water; (4) the row of antefixal ornaments or *ἀκρωτήρια* surmounting the side-tiles.[1]

The flat roof-tiles or *σωλῆνες*, as in the Heraion of Olympia and other early buildings, are square and slightly concave, so that the raised edges placed side by side may catch under the semi-cylindrical *καλυπτῆρες*, and so be held in their place. The latter are of plain semi-cylindrical form, except the row at the lower edge of the roof, which have attached to them the vertical semi-elliptical slabs known as "antefixae," of which more later.

The *κυμάτια* were painted with elaborate patterns of lotos-and-honeysuckle, or maeanders, in red, blue, brown, and yellow, the principle being preserved (as always in Greek architectural decoration) of employing curvilinear patterns only on curved surfaces, rectilinear only on flat surfaces.[2] At the back was the gutter for collecting rain-water, which ran off through the holes pierced at intervals in the cornice, passing through the mouths of lions' heads, moulded in very salient relief. These correspond to the gurgoyles of Gothic architecture. Many specimens have been found at Olympia, Elateia, and elsewhere in Greece; one of the finest, from a temple of Apollo at Metapontum, is now in the Bibliothèque Nationale at Paris. It is very finely modelled, and the whole, with the background, richly coloured in red, yellow, and black.[3] Spouts were sometimes modelled in other forms, such as a Satyric mask, or the fore-part of a lion; of the latter there are some examples in the British Museum.[4] In the accounts for the erection of the arsenal at the Peiraeus there is an interesting entry relating to these lions' head spouts, in which they are described as *κεραμίδες ἡγέμονες λεοντοκεφάλαι*, "principal tiles with lions' heads."[5]

The invention of antefixae is attributed by Pliny[6] to Butades

[1] On the origin of *ἀκρωτήρια* see Benndorf in *Jahreshefte*, 1899, p. 1 ff.

[2] Cf. *B.M. Cat. of Terracottas*, C 904.

[3] Rayet and Collignon, pl. 16.

[4] *Cat. of Terracottas*, D 707-8.

[5] Boeckh, *Urkunde über Seewesen* (*Staatshaushaltung*, iii.), p. 406.

[6] *H.N.* xxxv. 151.

of Sikyon, who is also credited with the invention of modelling in clay, in a well-known story; "he was," says Pliny, "the first to place masks on the extremities of the roof-tiles, which were at first called bas-reliefs (*protypa*), but afterwards alto-reliefs (*ectypa*)."[1] It is possible that the ἀγάλματα ὀπτῆς γῆς seen by Pausanias in the Stoa Basileios at Athens[2] were ἀκρωτήρια or antefixal ornaments at the angles of the cornice, but they are more likely to have been modelled free and in the round than in relief on a background.[3] Such sculptured groups were not uncommon in Greek architecture; thus the cornice of the pediment of the temple of Zeus at Olympia was adorned with a series of figures of Victory. The groups above mentioned represented Theseus slaying Skiron and Eos carrying off Kephalos; and it is interesting to note that a terracotta group with the latter subject found at Cervetri[4] also undoubtedly came from the cornice of a building.

The manner in which the antefixae were treated by the Greeks and Etruscans for purposes of decoration is well illustrated in the British Museum collection. In Cases 64—71 of the Terracotta Room may be seen a series from Capua of archaic style, the front part being semi-elliptical in form, having within an ornamental border a female bust, Gorgon's head, or other design in relief, all being richly coloured (Plate II.). The back projects in a semi-cylindrical termination, forming the covering-tile, with an arched support to the upright piece. Similar antefixae were found by Lord Savile at Civita Lavinia (see below), and some have elaborate subjects, such as Artemis with two lions, or a Satyr and Maenad with a panther (Plate II.).[5] Many have also been found at Cervetri, from which site came some interesting friezes of terracotta now in the British Museum (B 626) and at Berlin. These works of art, with which we must rank for their style the reliefs on the archaic terracotta sarcophagus in the British Museum (see Chapter XVIII.), show throughout a strong influence of

[1] *H.N.* xxxv. 152.

[2] i. 3, 1.

[3] The use of the word ἄγαλμα also seems to point to this conclusion.

[4] *Arch. Zeit.* 1882, pl. 15.

[5] *J.H.S.* xiii. p. 315. See generally, Minervini, *Terrecotte del Museo Campano.*

1 2

ARCHAIC ANTEFIXAE OF GRAECO-ITALIAN STYLE (BRITISH MUSEUM).

1, SATYR AND MAENAD, FROM CIVITA LAVINIA; 2, FEMALE HEAD, FROM CAPUA.

Ionic art; though all of local manufacture, their style is purely Greek, as is the case with many of the contemporary works in bronze found in Italy.[1]

Antefixes from Hellenic sites are not so common, nor do they present the same variety of subject or richness of colour. In many cases, as in the fourth-century British Museum specimens from Asia Minor,[2] the decoration is confined to scrolls and floral patterns in low relief, the palmette being regarded

FIG. 10. TERRACOTTA ANTEFIX FROM MARATHON (BRITISH MUSEUM).

as the most appropriate decorative motive for this form of tile. An example of this type in the British Museum (C 902 = Fig. 10), found on the field of Marathon, is inscribed with the name Athenaios. Many later antefixes with remains of colouring have been found at Tarentum, the subjects being chiefly heads of women or mythological personages.

Roof-tiles proper have been discovered in large numbers both in Greece and Italy. Olympia has proved the richest site in this respect, and there are many specimens in the

[1] See Furtwaengler, *Meisterwerke*, p. 250. [2] *Cat. of Terracottas*, C 910 ff.

Museums of Athens and Palermo.[1] Many of them have coloured decoration, and these terracotta remains are almost the only evidence we now have of the extensive system of colouring applied by the Greeks to their temples.[2]

At Olympia all the buildings have terracotta roofs except the temple of Zeus and two others, the dates varying from the seventh century B.C. down to Roman times. We know from Pausanias[3] that the temple of Zeus was roofed with marble tiles in imitation of terracotta, an invention traditionally attributed to Byzes of Naxos. The covering-tiles of the Heraion roof (see Fig. 9) end in semicircular discs painted with ornamental patterns; the flat roof-tiles are of the concave type described above. The normal sixth-century type of roof is seen in the Treasury of the Megarians, which has smooth flat tiles and covering-tiles ending in antefixes with palmette-and-lotos ornament, and a kymation cornice with lion's head spouts.

A greater variety of tiles is to be seen in the Treasury of Gela. Here for the first time we note the introduction of a new system, which consists in nailing slabs of terracotta over the surface of the stonework, or, to use the convenient German term, "Bekleidungstechnik."[4] It is obvious at the first glance that the origin of this practice dates from the time when buildings were largely or wholly of wood, which required protection from the weather. When the wood was replaced by stone, the fashion held its ground for a time; but with the more extensive use of marble, which could not well be covered in this manner, it disappeared altogether in Greece.

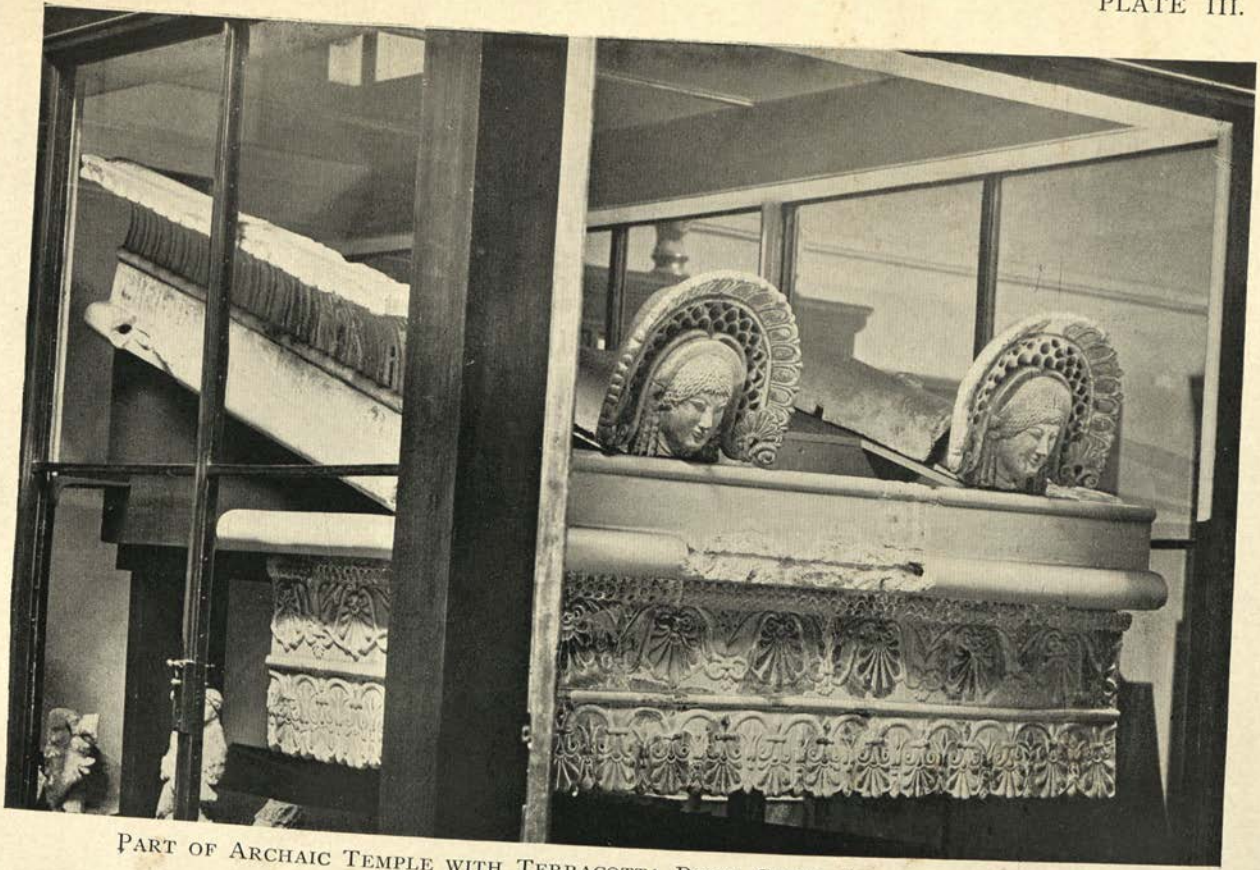
But the Treasury of Gela is by a Sicilian architect, and it seems highly probable that the method of decoration employed was not one usually practised in Greece, but was introduced from the Western Mediterranean. Though rare in Greece, it is exceedingly common in Sicily and Southern Italy. The

[1] A good example of a painted tile from Aegion in Achaia is in the British Museum (*Cat. of Terracottas*, C908).

[2] Cf. also the tiles from the temple at Elateia in Boeotia, described by M. Paris, *Élatée*, p. 106.

[3] v. 10, 3. It is noteworthy that Pausanias here uses the word *κέραμος*, although the tiles are not of terracotta, indicating that it had become by long usage the generic word for tiles of all kinds. Cf. St. Luke v. 19.

[4] See Dörpfeld, etc., *Verwendung von Terrakotten*, pls. 1-4; *Olympia*, ii. p. 193 ff.



PART OF ARCHAIC TEMPLE WITH TERRACOTTA ROOF, CIVITA LAVINIA, AS RESTORED IN THE BRITISH MUSEUM.

middle temple (known as C) on the acropolis of Selinus, and buildings at Gela and Syracuse, may be cited as examples. The principle is also well illustrated in the terracotta remains of the temple at Civita Lavinia, excavated by Lord Savile in 1890-94, which are now in the British Museum. They have, as far as possible, been incorporated in a conjectural restoration in the Etruscan Saloon (Plate III.).[1] It will be noted that most of the slabs are pierced with holes, by means of which they were attached to the walls or surface of the entablature; they are mostly decorated with lotos-and-honeysuckle and other patterns, in relief and coloured, the same being repeated in colour only on the back of the overhanging edges of the cornice. These remains belong to two periods, the end of the sixth century and the fourth century B.C.; they may be easily distinguished by the differences in the treatment of the ornamental patterns, while there is a marked absence of colouring in the later remains. Similar architectural remains in terracotta have been found in Etruria, and are described in Chapter XVIII. It should be noted that the Civita Lavinia slabs are flat, whereas those used at Olympia, and many others in Southern Italy and Sicily, are three-sided.

Specimens of ordinary Greek tiles have been found in many parts of the ancient world, besides those for special architectural purposes already discussed. Avolio[2] mentions many examples from Acrae and elsewhere in Sicily, stamped with emblems or names of officials and of makers. At Olbia, in Southern Russia, tiles were found stamped with names of Greek aediles (*ἀστυνόμοι*), like the amphora-handles described below (p. 158),[3] and in Corfu tiles and bricks with names of magistrates (*πρυτάνεις*), indicating in each case the existence of public regulations concerning the potteries.[4] At Kertch (Panticapaeum) Dr. Macpherson discovered large numbers of tiles with labels on which was stamped the word ΒΑΣΙΛΙΚΗ, "Royal," together with other inscriptions.[5] These tiles showed

[1] See *Builder*, 4 March 1899, p. 219.
[2] *Fatture di argille in Sicilia*, pp. 27, 31.
[3] Becker in *Mélanges Gréco-Romaines*, i. (1854), p. 482 ff.
[4] *Inscr. Gr.* ix. p. 164.
[5] *Antiqs. of Kertch*, pp. 72, 75, pl. 7.

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the manner of their attachment one upon the other, and their dimensions answered to the Lydian variety mentioned above. Other tiles discovered by Mr. Burgon at Athens, by Sir Charles Newton in Kalymnos, and by Mr. Colnaghi at Kandyla (Alyzia) in Acarnania, bore labels with inscriptions and designs in relief.[1] On one of the latter series in the British Museum is the inscription ΑΛΥΞΕΙΩΝ, "of the people of Alyzia" (Fig. 11); on another was inscribed in the manner of the Athenian vases (see Chapters X. and XVII.) ΙΠΠΕΟΣ ΚΑΛΟΣ ΑΡΙΣΤΟΜΕΔΕΙ ΔΟΚΕΙ, "Hippeus seems handsome to Aristomedes."[2]

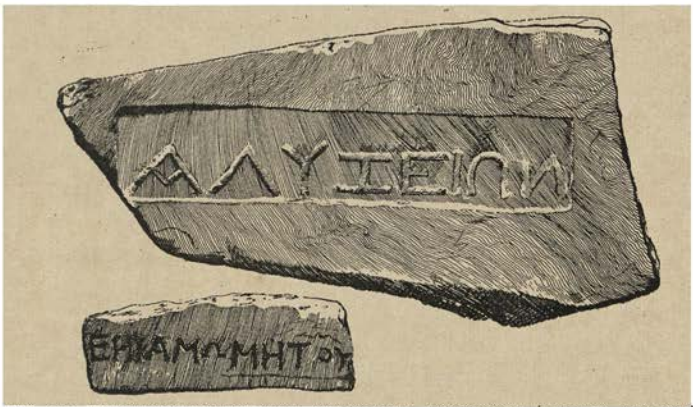


FIG. 11. INSCRIBED TILES FROM ACARNANIA AND CORFU (BRITISH MUSEUM).

Inscribed tiles from Greece proper are somewhat rare, and the best-known examples, to the number of sixteen, have been collected by M. Paris[3]; they are usually inscribed with the word ΔΗΜΟΣΙΑ or ΔΗΜΟΣΙΟΣ, as a sort of Government stamp. Others have magistrates' names, as ΦΡΟΔΓΙΣ, *Ἀ]φροδ(ε)ισίου*, on a tile at Corinth, or the maker's name, ΓΑΣΤΟΥΚΡΙΤ, *Γαστουκρίτ[ου*, on one from Thisbe in Boeotia.[4] Those found by M. Paris at Elateia have either the word ΔΗΜΟΣΙΟΣ or ΕΠΙ with the name of the magistrate; though all are fragmentary, it is possible to restore the full formula as *πλίνθος δημοσία ἐπὶ Ἀπελλέα*, "government bricks,

[1] See *Brit. Mus. Cat. of Terracottas*, E 131 ff., E 186.

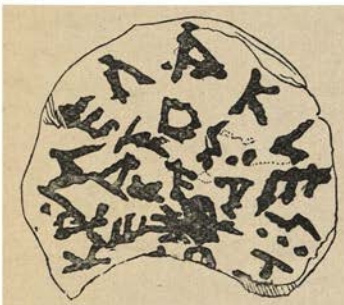
[2] Boeckh, *C.I.G.* i. 541.

[3] *Élatée*, p. 110.

[4] See also *Ath. Mitth.* 1877, p. 441, for a long inscription from Sparta.

in the year of Apelleas' office."[1] A remarkable tile or *stele*, found near Capua and now in the British Museum, has an inscription in Oscan, and two stamps of a boar and a head of Athena, resembling types on Italian coins of the early part of the third century.[2]

We may recall the fact that it was with a tile that Pyrrhus met his death when besieging Argos. Nor is this the only occasion on which these humble objects have played a part in history. In the well-known Athenian institution of Ostracism the act of voting was performed by writing on fragments of tiles or potsherds the names of those whom it was desired to banish. Recent excavations have yielded more than one actual



From *Benndorf*.

FIG. 12. OSTRAKON OF MEGAKLES.

From *Jahrbuch d. arch. Inst.*

FIG. 13. OSTRAKON OF XANTHIPPOS.

specimen of these ὄστρακα or sherds,—one bearing the name of Megakles (Fig. 12); another, part of a painted vase from the pre-Persian débris on the Athenian Acropolis, the name of Xanthippos, the father of Perikles (Fig. 13); and a third, that of Themistokles.[3]

It is also probable that in Greece, as among the Romans, the hollow floors of the hypocausts, as well as the flue-tiles of the hot baths, were made of terracotta. The same material was also used for the pipes, by means of which water was conveyed from

[1] Others with ἐπί and a magistrate's name are in the British Museum (*Cat. of Terracottas*, E 131-33, 186 ff.): see also *Inscr. Gr.* ix. 735 ff.

[2] *B.M. Cat. of Terracottas*, E 130.

[3] See Benndorf, *Gr. u. Sic. Vasenb.* p. 50, pl. 29, fig. 10; *Jahrbuch d. arch. Inst.* ii. (1887), p. 161; *Ath. Mitth.* 1897, p. 345; Hicks and Hill, *Gk. Hist. Inscrs.* p. 16.

aqueducts or drained from the soil. A drain-pipe from Ephesos in the Museum at Sèvres is noted by Brongniart and Riocreux,[1] and others have been found at Athens[2] and in the Troad.[3]

Tiles were also employed for constructing graves, as has already been noted in Chapter II. (see p. 34). In some tombs the floor was paved with flat tiles, and the roof was constructed of arched tiles forming a vault. The flat and square tiles were not used for tombs until a comparatively late period. Some graves had a second layer of tiles to protect the body from the superincumbent earth.[4] We shall have occasion to make further allusion to the use of painted terracotta slabs in Etruscan tombs (Chapter XVIII.).

The sarcophagi which played so important a part in the tomb were also frequently made of terracotta, this material being most commonly employed in Etruria. We have already mentioned (p. 62) the series of archaic painted sarcophagi, which have all come from Clazomenae, near Smyrna, and furnish us with much valuable information on the art of painting in Ionia in the sixth century B.C. They will receive some attention from this point of view in Chapter VIII. The British Museum contains two very remarkable examples of Etruscan terracotta sarcophagi, which are described in Chapter XVIII., as well as a series of smaller examples, which are mere cinerary urns. Among other examples of terracotta as used in tombs may be mentioned here a series of small reliefs found in tombs at Capua and elsewhere in Southern Italy. They consist of masks of Satyrs, river-gods, and Gorgons, and are often highly coloured in red and blue. They are of late archaic work, about 480 B.C., but the exact way in which they were used to decorate the tombs is uncertain. The British Museum collection contains many specimens of these objects.[5]

There is a curious class of objects which hardly come under the heading of any other category, but may be conveniently discussed here. Complete specimens are very rare, but there is

[1] *Musée de Sèvres*, p. 19.

[2] *Ath. Mitth.* ii. (1877), pl. 8, p. 119; Daremberg and Saglio, *Dict.* i. p. 1260, fig. 1673.

[3] Daremberg and Saglio, i. p. 338, fig. 399.

[4] Cf. Stackelberg, *Gräber der Hellenen*, pl. 7; Dodwell, *Tour*, i. p. 452.

[5] *Cat. of Terracottas*, B494 ff.

one in the Museum at Geneva which has been identified as a brazier (πύραννος or ἐσχάρα), and more recently as a baking-oven (κλίβανος).[1] The form is that of a large basin on a high stand, hollow underneath, with three square solid handles projecting upwards from the rim. These handles, of which over a thousand examples are to be found in various collections, are usually the only part remaining, sometimes with part of the rim attached. They are decorated with heads and other devices, usually in relief on square panels, and the majority of these heads are of a Satyric or grotesque character, wearing conical caps or adorned with ivy-wreaths. They probably represent demons of some kind, and are placed there with superstitious intent, to avert evil influences from whatever was baked or cooked in the vessel. Similar masks are usually seen attached to representations of forges and ovens on the painted vases,[2] and remind us of the pseudo-Homeric invocation of evil deities against the potters of Samos (see also p. 213 below). Professor Furtwaengler has identified the heads as those of the Kyklopes, the attendant workmen of Hephaistos.[3]

These objects are found all over the Mediterranean, especially at Halikarnassos, Naukratis, and Delos, and the last-named place has been regarded as the centre of their manufacture. They are all of the same brick-like, coarse, red clay. Some bear the name of their maker, Hekataios or Nikolaos. Besides the heads already mentioned, heads of goats or oxen, or of Sirius, thunderbolts and rosettes are used by way of devices. They have been collected together, and illustrations of all the different types given by Conze in the *Jahrbuch* for 1890, p. 118 ff.: two specimens are given on Plate IV. They belong to the Hellenistic Age.

Other objects that exemplify the use of clay or terracotta in Greek daily life are: moulds for vases and terracotta figures, lamps, weights, and stamps for various purposes. Many flat discs of terracotta have been found at Tarsus, Gela in Sicily, Tarentum, and other places, pierced with two holes and about

[1] Benndorf in *Eranos Vindobonensis*, p. 384.

[2] Fig. 67. Cf. also Berlin 2294, and see Daremberg and Saglio, *s.v.* Caminus.

[3] *Jahrbuch*, vi. (1891), p. 110.

three inches in diameter.[1] They are stamped with various devices and inscriptions, but their use is unknown. Other discs of convex form found at Halikarnassos and stamped with heads in relief are supposed to have been weights (λεῖαι) to hold down the threads of the loom (*ἀγνύθες*),[2] such as are used by the Greeks at the present day; others again may be the weights used for keeping the ends of the folds of a himation in position. Small pierced cones of terracotta often found in the fields of Greece have been supposed to have been suspended round the necks of cattle, but are probably weights of some kind.[3] Lastly, terracotta egg-shaped objects have been found in Sicily inscribed with various names, and are supposed to have been voting-tickets used for the ballots of the tribes.[4]

Many examples have been found of terracotta impressions from coins, which may have been the trial-pieces of die-sinkers or forgers, since persons of that class, as among the Romans, seem to have employed this material for their nefarious practices. They are more fully discussed in Chapter XIX. The British Museum contains a large collection of these found in the Fayûm in Egypt, all of Roman date; also a copy of a coin of Larissa from Acarnania. Terracotta medallions with impressions of gems or seals are not uncommon, especially in Asia Minor and at Naukratis, and among the latter are many lumps of clay actually used as seals, with the pattern of the substance in which they were impressed adhering to the back of them, while on the front is a design from a signet-ring.[5]

The subject of **Lamps** is one that is more conveniently and appropriately treated in the Roman section of this work (see Chapter XX.), almost all existing examples in terracotta being of that period; it may not, however, be out of place to include here a few general remarks on the subject, pointing out the distinctive features of those of purely Greek origin.

The invention of lamps was ascribed by Clement of Alexandria

[1] *B.M. Cat. of Terracottas*, E 156 ff.
[2] See *J.H.S.* xiii. p. 80.
[3] Cf. Macpherson, *Antiqs. of Kertch*, p. 103.
[4] Boeckh, *C.I.G.* iii. 5686.
[5] For examples of these see *B.M. Cat. of Terracottas*, E 93 ff.

1 2 3

4 5 6

GREEK LAMPS AND "BRAZIER-HANDLES."

1, 3, 4, 6, LAMPS FROM GREEK SITES; 2, 5 BRAZIERS FROM HALIKARNASSOS AND CYPRUS (BRITISH MUSEUM).

to the Egyptians; and they were certainly in common use among the Greeks. Herodotos[1] describes those which he saw in Egypt as simple saucers filled with oil in which the wick floated, and this statement is partly supported by the form of the lamps found in the earlier tombs of Cyprus and on sites under Phoenician influence.[2] He also uses the phrase *περὶ λύχνων ἁφάς*, "about the time of lighting lamps," to denote the evening.[3] The Greek comic writers allude to the use of lamps of terra-cotta or metal,[4] and they played a part in religious ceremonies.

The regular Greek name for a lamp was *λύχνος* (not *λαμπάς*, which means a torch), and a lampstand was called *λυχνοῦχος*; the spout or nozzle in which the wick was placed was known as *μύξος* or *μυκτήρ*, the wick itself as *ἐλλύχνιον*.[5] A lamp with more than one nozzle was known as *δίμυξος* or *τρίμυξος*.[6] The simple form was that derived from the Phoenician lamp, an open saucer with a bent-up lip in which the wick was placed; but commonly the Greek lamp had a circular or oval body (the receiver) with flat covered top, in the centre of which was the filling-hole. To this was sometimes attached a handle permitting the insertion of a finger, and the nozzle was usually very small and quite plain. An epithet applied by Aristophanes[7] to a lamp is *τροχήλατος*, "made on the wheel"; but evidence points to their being always made in moulds.

The majority of the lamps which have been found on Greek sites are of Roman date, and they frequently bear Latin inscriptions; those of the Hellenic period are seldom ornamented, and are usually covered with a thin black glaze. Others are modelled in the form of human figures, animals, heads, or sandalled feet; the British Museum possesses a good example of grey ware from Knidos in the form of a figure of Artemis (*Cat.* C 421), with the oil-receptacle on the top of her head; another from Naukratis represents Eros (see for these Plate IV.). One from Athens was inscribed ΜΗ ΑΠΤΟΥ, "Do not touch,"[8] an

[1] ii. 62.

[2] See Daremberg and Saglio, *art.* Lucerna, *init.*; *Cyprus Mus. Cat.* p. 80.

[3] vii. 215.

[4] Ar. *Eccl.* 1; Axionikos, quoted by Pollux, x. 122.

[5] The words *φλόμος* and *θρυαλλίς* seem to denote the *material* of which the wick was made (cf. Pollux, x. 115).

[6] Pollux, vi. 103; x. 115.

[7] *Loc. cit. supr.*

[8] *Bull. dell' Inst.* 1868, p. 59.

inscription of similar import to those on the Roman lamps from the Esquiline described in Chapter XX.

Little has at present been done in the way of a scientific investigation of Roman lamps, but the results of a rough classification according to shapes show that certain forms are more specially associated with Greek sites, and moreover frequently bear names of makers in Greek letters. This is particularly the case with one form, which appears to be confined to Athens, Corfu, the coast of Asia Minor, and Cyprus. These lamps, of a pale yellow clay, have a circular body with flat top, round the edge of which runs a border of impressed egg-pattern, interrupted on either side by a small plain raised panel.[1] The handle is small and pierced with a hole, the nozzle also small, with straight sides. These lamps bear the makers' names (in the genitive), Primus (ΠΡΕΙΜΟΥ), Abaskantos (ΑΒΑCΚΑΝΤΟΥ), etc., the former being especially common; all are in Greek letters. Some again only have a single letter or monogram engraved underneath. They are often very carefully executed, with sharply cut details, and the subjects are usually mythological (see Plate IV. fig. 1); they appear to be of very late date, not earlier than the third century after Christ.

Another form which appears to be specially characteristic of Greek sites is that with a plain or heart-shaped nozzle, sometimes with a groove incised at the base, but without a handle. They are usually quite small, with circular bodies. Large numbers of these were found by Mr. Newton at Knidos in 1859,[2] and by Mr. Barker at Tarsos in 1845.[3] The subjects are mostly poor and devoid of interest, including animals, rosettes, and various floral patterns. Many of these lamps bear the signature ROMANE(N)SIS, the form of the word indicating that they were made by a Roman residing abroad (*i.e.* at Knidos), not in Rome.[4] A third form, approximating to the Christian type, has a small solid handle and plain nozzle, and is confined to sites on or near the coast of Asia

[1] Probably an imitation of the projections on bronze lamps, to which chains for suspension were attached. See on this type *Amer. Journ. of Arch.* 1903, p. 338 ff.

[2] Newton, *Travels and Discoveries*, ii. p. 184 = *Discoveries*, ii. pt. 2, p. 395.

[3] Barker and Ainsworth, *Lares and Penates*, p. 201.

[4] See *C.I.L.* iii. Suppl. No. 7310.

Minor. These, with the remaining types of lamps, will be more fully dealt with in the Roman section of this work. It may, however, be worth while mentioning here that Mr. Newton found at Knidos several lamps of a coarse black ware, covered with thin glaze, which are mostly of large size. They are circular, and convex above, and are supplied with two or more long nozzles with blunt terminations radiating round them (see Plate IV. fig. 6). Between the nozzles are roughly stamped devices of Satyrs' heads, flowers, etc., in relief. These may fairly be regarded as a Greek type.

The subject of Greek **sculpture in terracotta** is so wide as to demand a volume to itself; but a discussion of the uses to which clay was put by the Greeks would not be complete without some mention of their achievements in this direction. We propose therefore briefly to review the main features of Greek terracotta statuettes and reliefs, by way of illustrating the purely artistic use which they made of this material.

The subject may be divided under four heads: (1) Large statues; (2) Statuettes or figurines; (3) Reliefs; (4) Moulds. Large or life-size statues belong more particularly to the earlier phases of Greek art, but appear again in its later developments, under Italian influences. Statues of terracotta were also a common feature of Italian art, being, in fact, the usual material employed by Etruscan statuaries, as well as for the decoration of temples (see Chapter XVIII.). Greek terracotta statues are practically non-existent; and although there are some female figures nearly life-size and a male torso of almost colossal proportions in the British Museum, also a Hermes in the Vatican, these were found at Rome, belong to the Roman period, and, though Greek in style, are really following an Etruscan fashion.

It is characteristic of the Hellenic race that from its earliest beginnings it did not employ clay for utilitarian purposes exclusively, but, influenced partly by the natural imitative instincts of man, partly by the anthropomorphic tendencies of the Greek religion, soon learned the value of this easily worked

material for producing images of deities, animals, and other objects. Although an equally high antiquity may be claimed for images of wood, and the word *ξόανον* used for a primitive cult-statue argues for the frequent use of this material, yet the history of the word *πλάσσειν* tells equally in the other direction. Originally used of moulding wet clay, it came by degrees to denote modelling in general, and finally its derivative *πλαστική* became the authorised classical word for sculpture.

Lactantius[1] speaks of Prometheus as the inventor of fictile images for religious purposes, and of figures in bronze and marble as a later development; the Latin poets[2] bear similar witness to the primitive use of clay for sculptured images, and Pliny marvels at its long-continued employment in Italy.[3] Among early Greek legends the most noteworthy is that of Butades, the potter of Sikyon, to whom the invention of modelling clay in relief was ascribed by Pliny[4] and Athenagoras. The story as told by the former was that, in order to preserve the likeness of his daughter's lover, he moulded in terracotta the shadow of his profile which the girl drew on the wall. This account, however, is not very intelligible, and the clue is perhaps to be found in the words of Athenagoras,[5] who says that he hollowed out the lines of the face in the wall, filled in the grooves with clay, and so obtained his relief as from a mould. This primitive work of art was said to have been exhibited in the Nymphaeum at Corinth.

But this same invention was also claimed by the Samian sculptors, Theodoros and Rhoikos, who flourished about the end of the seventh century. They were pre-eminently artists in bronze, and were associated with the introduction of hollow-casting in that material into Greece; it may therefore be supposed that they actually were among the first to use clay models for statues, this being an essential preliminary to the hollow-casting process. This would not be incompatible with

[1] *Div. Inst.* ii. 11.

[2] Juvenal, xi. 116; Propertius, v. 1, 5; Ovid, *Fast.* i. 202.

[3] *H.N.* xxxiv. 34.

[4] *H.N.* xxxv. 151.

[5] *Leg. pro Christ.* 17, 293, *ed.* Migne; see Blümner, *Technologie*, ii. p. 129, note 2.

the invention of moulding reliefs by Butades, admitting the truth of his story. The latter was also credited with the invention of antefixal ornaments (see above, p. 98) and the introduction of a mixture of red ochre or ruddle with clay in order to give it a warmer tone.

The clay models used by sculptors as the basis of their work, which were known as *προπλάσματα*, were probably made on the same lines as the large works of art in clay. We read that Lysistratos of Sikyon, the brother of Lysippos, was the first to make casts of statues by means of terracotta moulds,[1] implying that it was about this time that the practice arose of multiplying the principal statues in the same manner as is now done by means of plaster casts. Some of the latter artists combined the plastic art with that of painting, and Zeuxis is said to have previously modelled in terracotta the subjects which he afterwards painted. Pasiteles, an artist who lived at Rome in the first century B.C., always first modelled his statues in terracotta, and spoke of the plastic art as the mother of statuary.[2] But it must not be supposed that as a general rule the Greek sculptors worked their marble statues from models; rather, the contrary was the case, and Pasiteles seems to have been peculiar in this respect.

The statue of Zeus, which has already been mentioned as made by Theokosmos for Megara (p. 92), appears to have been made from a clay model. It was intended to be of gold and ivory, but the breaking out of the Peloponnesian War prevented the artist from carrying out his intention, and only the head was completed, the other portions being of gypsum and terracotta. At a later period gypsum was sometimes used for sculpture, as in the case of an Apollo mentioned by Prudentius,[3] and some fragmentary remains from Cyprus in the British Museum.

The clay models were sometimes made entirely by hand, but more usually on a wooden core known as *κάναβος*,[4] which we may conjecture to have been formed of two rods in the

[1] *H.N.* xxxv. 153. [2] *Ibid.* 156.
[3] *Apotheosis*, 458. See generally Blümner, ii. p. 140 ff.
[4] Pollux, x. 189; Hesych., *s.v.*; *Ber. d. sächs. Gesellsch.* 1854, p. 42; Blümner, ii. pp. 42, 117; and cf. p. 153 below.

form of a cross, from the use of the Latin word *crux* in this connection.[1] It was certainly a framework, not a solid core, and must be carefully distinguished from *κίνναβος*, a lay-figure. Aristotle, in an interesting passage, uses the word in speaking of skeletons drawn on a wall.[2] The modelling of details was done partly with tools, partly with the finger, The use of the finger-nail for this purpose became proverbial. as in the saying attributed to Polykleitos: "When the clay has reached the finger-nail stage, then the real difficulty begins."[3]

The chief attention of inferior artists was directed to the production of small terracotta figures, which the Greeks used as ornaments or household gods, buried in their tombs, or dedicated in their temples. They follow the same lines of development as the larger sculptures, beginning with the columnar (*ξόανα*) and board-like (*σανίδες*) types found in the primitive tombs of the Mycenaean and early Hellenic civilisation. Originally they seem to have been manufactured purely for religious purposes, but in course of time, with the gradual rationalising of religious beliefs and consequent secularisation of art-types, they lost this significance, and, while the *types* were preserved, they were converted into *genre* figures from daily life.

These statuettes have been found on nearly all the famous sites of antiquity from Babylonia to Carthage and Kertch; the most fruitful have been Tanagra in Boeotia, Rhodes, the Cyrenaica, Capua and Canosa in Italy, and various sites in Sicily. In Cyprus, Sardinia, and to a great extent also in Rhodes, Phoenician influences seem to have been dominant, and the earlier types bear a markedly Oriental character. For beauty and charm the palm has by general consent been given to the Tanagra statuettes of the fourth and third centuries, which were known in antiquity as *κόραι* or "maidens," from the prevalence of the seated or standing types of girls in various attitudes.

The makers of these charming figures, known as *κοροπλάσται* or *κοροπλάθοι*, were, like the vase-painters, quite in a subordinate position in the artistic world, and are spoken of

[1] Tertull. *Apol.* 12; *ad Nat.* i. 12.
[2] *Anim. Gener.* ii. 6; *Hist. Anim.* iii. 5.
[3] Plut. *De profect. in virt.* 17, p. 86 A; *Quaest. conviv.* ii. 3, 2, p. 636 C.

with some contempt by Isokrates, as if it would be absurd to compare them with a Pheidias or a Zeuxis.[1] A fable of Aesop's[2] represents Hermes being offered a statue of Zeus for a drachma and one of himself for a mere song; the low price seems to suggest that they were of terracotta, but the vendor is called an *ἀγαλματοποιός*, not a *κοροπλάθος*. Demosthenes[3] condemns the Athenians for voting for figure-head generals like makers of toys for the market; and in further illustration of the uses to which they were put, we may cite the definition of Suidas, of "those who fashion little images out of clay of all kinds of creatures, with which to trick children"; and the remark of Dio Chrysostom, who speaks of those who buy the "maiden" figures for their children. A pretty epigram in the *Anthology*[4] tells how Timareta, when about to marry, dedicated to Artemis the playthings of her childhood, including her terracotta dolls (*κόρας*). Lastly, Plato speaks of *κόραι* and images hung up in shrines.[5]

The processes employed in the manufacture of terracotta statuettes were five in number: (1) the preparation of the clay; (2) moulding; (3) retouching; (4) baking; and (5) colouring and gilding. It does not follow that all five were employed in the production of any one object; on the other hand, all processes necessary to the completion of any one object fall under one or other of these heads.

There were many varieties of clay in use among the Greeks, some being considered more suitable for one purpose, some for another. These clays vary in their characteristics in different parts of the Greek world, and this may often be an important criterion for distinguishing fabrics and detecting instances of importation. The clay of Cyprus differs much from that of Rhodes, and that of Naukratis again from either, being of a dark, coarse, and brick-like consistency. M. Pottier noted nine varieties of clay in use at Myrina in Asia Minor, and M. Martha distinguishes five in the terracottas of Athens. But these differences may be explained by variations in the length or temperature of the firing rather than in the clay.

[1] *De permut.* 2.
[2] *Fab.* 137 (Teubner).
[3] *Phil.* i. 9, § 47.
[4] *Anth. P.* vi. 280.
[5] *Phaedr.* 230 B.

Generally speaking, the clay of the terracottas is softer and more porous than that of the vases. It is easily scratched or marked, and does not ring a clear sound when struck; nor does it when submitted to a high temperature become so hard as the pottery.[1] Its colour ranges from deep red to a pale buff colour, and its texture and density vary greatly in different localities. It was prepared by being washed free of all granular substances, and then kneaded with the aid of water. So, as we read in Hesiod's account of the creation of Pandora,[2] the god directed the mixing of clay and water, in order to form his new creation.

The modelling of the figures was done by hand in the case of the earlier fabrics, and of small objects such as the toys and dolls; the clay was worked up into a solid mass with the fingers, and the marks of these, left while it was wet, may still be often seen. Subsequently the use of moulds became universal, the final touches being given to the figure either with the finger or with a graving-tool, traces of which are often visible on the faces and hair of the Tanagra figures. These were invariably moulded, and the finer ones show traces of having been most carefully touched up.

There is a pretty epigram in the Anthology,[3] which seems to imply that the wheel was sometimes brought into use for modelling figures, perhaps for the first rough outlining. A statuette of Hermes is supposed to say:

> The rolling circle of the potter's wheel
> Me, Hermes, formed, of clay from head to heel.
> Mud-made, I lie not: the poor potter's art,
> Stranger! was ever pleasant to my heart.
>
> (MACGREGOR.)

The process of moulding gave scope for reducing the "walls" of the figure to the smallest possible thickness, thereby avoiding the danger of shrinkage in the baking; it also rendered them extremely light, and allowed of great accuracy in detail. A model (*πρότυπος*) was made in terracotta with modelling-tools, from which the mould (*τύπος*) was taken, also in terracotta,

[1] Brongniart, *Traité*, i. p. 305.
[2] *Op. et Di.* 60: ἐκέλευσε . . . γαῖαν ὕδει φύρειν.
[3] *Anth. P.* xvi. 191.

1 2, 3 4

MOULDS FOR TERRACOTTA FIGURES, WITH CASTS FROM THE MOULDS.

2, 3, ARCHAIC, FROM RHODES; 1, 4, ARCHAISTIC, FROM TARENTUM (BRITISH MUSEUM).

usually in two pieces, which were then baked to a considerable hardness. From this mould the figure was made by smearing it with layers of clay until a sufficient thickness was reached, leaving the figure hollow. The back was made separately, either from a mould or by hand, and then fitted carefully on to the front, the join being concealed by a layer of wet clay. The base was usually left open, and a vent-hole was left at the back which may have served a double purpose—first to allow the clay to contract without cracking, and subsequently in some cases for the suspension of the completed figure.

The heads and arms were usually moulded separately and attached afterwards, and altogether the average number of moulds employed—say for a Tanagra figure—was four or five. M. Pottier[1] quotes an instance of an Eros from Myrina which is made up of no less than fourteen; yet it is not a specially complicated figure.

Greek moulds, either for statuettes or reliefs, are somewhat rare; but the British Museum contains a fair number from Tarentum of all kinds (see Plate V.).[2] Those that we possess are mostly for small objects, such as figures of animals; but in the Museum collection there are several moulds for reliefs, as well as for vases of the later class with reliefs (see Chapters XI., XXII.), such as the Calenian phialae with embossed designs.[3] Moulds employed for making stamps of various kinds are also in existence; at Naukratis Mr. Petrie found several circular "cake-stamps" with various designs. Of the moulds used by forgers or others for copying coins we have already spoken (p. 106).[4]

The shrinkage of the clay as it dried afterwards permitted the figure to be withdrawn easily from the mould, and it was then ready for the necessary retouching. It is obvious from a glance at any collection of terracottas that there is a great

[1] *Statuettes de Terre Cuite*, p. 251.

[2] *Cat. of Terracottas*, E 1 ff.

[3] See also for some interesting moulds from Girgenti, *Röm. Mitth.* xii. (1897), p. 253 ff. Similar specimens have been found at Kertch and Smyrna.

[4] See also on the subject C. C. Edgar, *Greek Moulds* (*Cat. du Mus. du Caire*, viii. 1903), pls. 23-8, 33, p. xiv ff. These moulds are nearly all made of plaster; but the account there given of the technical processes would hold good of terracotta moulds.

similarity between the various representatives of any one type, and that actual or virtual repetitions are by no means uncommon. This was, of course, due to the fact that only a limited number of moulds were used, corresponding to the different types. At the same time there are in almost all cases minute differences which redeem them from a charge of monotony, and these were obtained in various ways: by varying the pose of the head or attaching the arms in different positions; by retouching before the baking; or by the addition of attributes and colouring. As it has been neatly put by M. Pottier,[1] "All the Tanagra figures are sisters, but few of them are twins." But retouching is not invariable, and is, in fact, confined to the finer specimens, such as those of Tanagra. In the statuettes from the Cyrenaica and Southern Italy it is the exception. The difference which it effected may be well observed by comparing two statuettes of Eros in the British Museum from Myrina (C 535-36), which are from the same mould. They are identical in style and type, yet one is far superior to the other in artistic merit, just because of the greater finish of detail.

The process of baking required great care and attention; for if no allowance was made for the evaporation of moisture, or if too great a degree of temperature was reached, the result was bound to be disastrous. It does not appear that a very high temperature was reached, especially as compared with the pottery. The clay was further insured against too rapid drying by preliminary exposure to the air. A story told by Plutarch[2] of the fate which befell the chariot cast for the temple of Jupiter on the Capitol illustrates the possibility of disasters either from accident or carelessness. The clay swelled up to such a size and hardness that it could only be extracted by pulling the kiln to pieces.

The colouring of statuettes may be considered a fairly universal practice, although not always suggested by their present appearance. The earlier archaic specimens were not always, or only roughly, coloured, and those of the Roman period seem to have been often left plain; but otherwise it is the general rule. The surface on which the colours were applied

[1] *Op. cit.* p. 254.

[2] *Poplic.* 13; see Chapter XVIII.

was formed by a white slip or *engobe* of a creamy colour and consistency, with which the whole figure (except the back) was coated. This when dry becomes very flaky, and is liable to drop off, carrying the colours with it; most statuettes retain at least traces of this coating.

The method of painting is that known as *in tempera*, the pigments being opaque, mixed with some stiffening medium. The colouring was as a rule conventional, aiming at giving the figure a pleasing appearance, without any particular regard to nature. It was applied after the firing, as in that process the colours would have been liable to injury. The tints are what are known as body-colours, without any attempts at shading, and those usually employed are red, blue, yellow, and black, the white slip forming a ground throughout, and left untouched over the nude parts and often over the drapery; of these the favourites, especially for drapery, were blue and red, as also we learn from Lucian.[1] Pollux says it was a speciality of the *κοροπλάθοι* to colour their figures yellow, or with a golden tint.[2] The reds range in shade from scarlet to rose-colour and purple. At all times there was a tendency to treat the drapery in masses of colour, and this we see especially in the Tanagra figures, in which the chiton is almost invariably blue, the himation rose-pink. At a later date it became more customary to leave the drapery white, with borders and stripes only of colour. Black was only used for details of features, such as the eyes; green is very rare; and yellow was employed (in a deep brownish shade) for the hair, and also for jewellery, etc. The use of gilding is at all times rare in the statuettes; but some good examples are known—as, for instance, two archaic statuettes from the Polledrara tomb, and a head of Zeus, all in the British Museum.[3] Imitation jewellery in terra-cotta gilt is not at all uncommon. On many of the earlier figures from Cyprus the drapery is indicated by stripes of red and yellow laid directly on the clay, while animals are usually decorated with stripes of red and black; the method employed is the same as on the contemporary vases (p. 253). Similarly,

[1] *Lexiph.* 22.
[2] vii. 163.
[3] *Cat.* B 458-59, D 392.

in the terracottas of the Mycenaean and Geometrical periods, such as those from Boeotia, the technique of the painted vases is closely followed, and the same decorative patterns are employed.

The use of an enamelled glaze first appears at Athens in the fourth century, and it is also occasionally found at Tanagra. The colour is uniformly a dull ashen-grey. A few examples are also known from the Cyrenaica, but it was in Sicily that the practice found most favour. There we find attempts to reproduce the colouring of the flesh by an enamel coating varying in hue from rose-pink to orange, and also grey and purple tints.

It is probable that the colours employed for painting terracottas were made from the same earths, though of a coarser kind, as the ware itself. Some information on the subject may be derived from Theophrastos, Vitruvius, and Dioskorides.[1] For white the artist used a white earth, such as Melos produces, and white lead; it is also said to have been produced from the burnt lees of wine, and from ivory. The reds were composed of a red earth, probably ochre from Sinope, and vermilion or *minium*. Yellow was obtained from Skyros and Lydia; and a yellow ochre was obtained by burning a red earth.[2] The Egyptian *smalto* or cobalt served for blue, and a copper solution prepared with alkali and silica was also employed. Copper green was obtained from many places, and mixed with white or black.

This may be a convenient point at which to speak of a class of vases which come rather under the heading of terracottas than that of painted pottery. They are found at Calvi, Canosa, Cumae, and other places in Southern Italy, and belong to the Hellenistic period, forming a parallel development to the glazed wares with reliefs of which we shall speak later (p. 497 ff.). They combine in a marked degree the characteristics of the vase and the statuette, some being vases with moulded reliefs or small figures in the round attached in different places, others again actual figures or colossal heads modelled in vase

[1] See Blümner, *Technologie*, iv. p. 464 ff.

[2] Hirt, *Gesch. d. bild. Kunst*, p. 165.

TERRACOTTA VASES FROM SOUTHERN ITALY (BRITISH MUSEUM).

form by the addition of mouth, handle, and base (see Plate VI.). They are usually of considerable—sometimes gigantic—size, and do not appear to have served any practical purpose; some, indeed, are only imitation vases with false bottoms. It is reasonable to suppose that they were manufactured for sepulchral purposes only, like the large painted kraters and amphorae of Apulia (p. 476).

Like the statuettes, they are covered throughout with a white slip laid directly on the unglazed clay, and this is often richly coloured *in tempera*. Some of the heads have the hair covered with intersecting pink lines to imitate a net, and the figures attached to them are usually coloured in the manner of the statuettes, with blue and pink draperies. There are some, however, in which the encaustic or a similar process seems to have been employed[1]; one example, in the British Museum (D 185, shown on Plate VI.), has a Hippocamp painted on either side in white and colours outlined with black, the wings being elaborately rendered in blue, brown, yellow, and pink. The same process is employed for a large cover of a vase in the British Museum from Sicily (D 1), but the figures are now nearly obliterated.

The prevailing shape of these vases is that conventionally known as the *askos*, with spherical body, over which passes a flat handle and three mouths on the top; the latter are often covered in and figures placed upon them. On the front and back of these vases *appliqué* masks of Medusa or figures in relief are usually placed, flanked by the fore-parts of galloping horses. Others take the form of a large jug or bowl with *appliqué* ornaments.

It now remains to consider the small but interesting class of terracotta reliefs, which are nearly all of the late archaic period, dating from the beginning of the fifth century. Later reliefs are nearly all architectural in character, and have already been described, as have those which were made for the decoration of tombs and sarcophagi. But the purpose for which the reliefs were made, of which we are about to speak, is not so certain. One group appears from the character of the

[1] Pliny (*H.N.* xxxvi. 189) mentions one Agrippa who painted in encaustic on terracotta: see Chapter XIX. for possible examples of this process.

subjects to be votive, and they may possibly have been let into the walls of temples or shrines; but the others are mostly known to have been found in tombs. The former group are found at Athens and at Locri in Southern Italy; the latter at Melos and other sites round the Aegean Sea, being usually known as "Melian" reliefs.

The character of the work of these Melian reliefs (see Plate VII.) is exceedingly delicate and refined; the subjects are mainly mythological, and include the slaying of Medusa by Perseus and of the Chimaera by Bellerophon, Helle on the ram, Peleus seizing Thetis, Eos carrying off Kephalos, and the death of Aktaeon. Three classes have been distinguished,[1] of which the peculiarly Melian type has the figures cut out, without background; in the second only the outer contours are cut round, and the third consists of rectangular plaques.

Brunn[2] considers that they served a definite architectural purpose, being intended to cover a field enclosed by borders, and that the holes with which they are pierced show that they were used either for suspension or attachment. But his reasons for regarding them as an archaistic survival have not been generally accepted.

The Locrian type of relief takes the form of a square plaque.[3] They are easily recognised by the rough micaceous character of the clay, and by their subjects, which mostly relate to the myth and cult of Persephone. They were probably dedicated in one of her shrines, as were those found on the Acropolis at Athens to Athena. All these reliefs seem to have been impressed in moulds, not modelled by hand, as many of them exist in duplicate. Those from Greece are sometimes coloured.

Many little figures in the shape of animals and other objects, such as goats, pigs, pigeons, tortoises, chariots or boats, boys or apes riding on animals, women making bread, and similar subjects, together with jointed dolls or *νευρόσπαστα*, were evidently used as children's toys. They have been found deposited with the

[1] Schöne, *Gr. Reliefs*, p. 62.

[2] *Sitzungber. d. k. bayer. Akad. Phil. Cl.* 1883, p. 299 ff.

[3] See for those from Athens *J.H.S.* xvii. p. 306 ff.

TERRACOTTA "MELIAN" RELIEFS, ARCHAIC PERIOD (BRIT. MUS.).

bodies of children in the tombs of Melos, Rhodes, and Athens. In Mr. Biliotti's excavations at Kameiros in Rhodes in 1863, one child's tomb was found containing two of the "Melian" reliefs, small vases of glass and black-glazed ware, a terracotta basket of fruit, and a sea-shell; in another were a bird, two dolls, a child in a cradle, two grotesque figures, a woman playing a tambourine, and two other terracotta figures.

The terracotta dolls were cast in a mould like the ordinary figures, but the bodies, legs, and arms are formed of separate pieces pierced with holes, so that they might be joined and moved with strings, like the modern marionettes; hence their name of *νευρόσπαστα*, "drawn by wires." They all represent girls, and sometimes dancers with castanets in their hands; they are coloured in the usual manner, and date from various periods between 500 and 200 B.C. Allusion is sometimes made to these figures in the Greek writers—as, for instance, by Xenophon, who in his *Symposium*[1] introduces Socrates inquiring of an exhibitor of these puppets what he chiefly relies on in the world. "A great number of fools," he replies, "for such are those who support me by the pleasure they take in my performances." Aristotle[2] mentions dolls that moved their limbs and winked their eyes like marionettes, but this can hardly refer to terracotta figures.[3]

It would require too much space to enumerate all the **subjects** represented in the terracotta statuettes. But it may be found convenient to give an outline of the subjects and principal types adopted at different periods.[4] Roughly speaking, the range of subjects may be divided into seven groups: (1) figures of deities; (2) mythological subjects; (3) scenes from daily life; (4) imitations of works of art; (5) caricatures; (6) masks; (7) animals. Among the figures of the Olympian deities we find most commonly Demeter, Aphrodite, and Artemis;

[1] iv. 55.

[2] *De Mundo*, 6, 398.

[3] See on the subject Hermann, *Lehrbuch d. gr. Altert.* iv. (1882), p. 295; Blümner, *Technol.* ii. p. 123; Baumeister, *Denkm.* ii. p. 778.

[4] A *Corpus* of all the known types of terracotta statuettes has recently been published by the German Archæological Institute, edited by Dr. F. Winter (*Typen der figürlichen Terrakotten*, 2 vols. 1903).

Hephaistos, Ares, and Hestia are seldom if ever represented; Zeus, Poseidon, Hera, and even Athena are also very rare. Of the inferior deities, Dionysos, Persephone, Eros, and Nike (Victory) are most frequently found, as well as Satyrs and similar personages. Nor is it always easy to ascertain definitely whether a figure is or is not intended to be mythological in significance.

This question is, in fact, closely bound up with that of the Uses for which the statuettes were made, as on such a purpose their interpretation in a mythological or human sense may largely depend. The uncertainty of identification arises from the practice which obtained of adhering closely to certain recognised *types*, which occur repeatedly at all periods. There is a strong probability that a clear distinction was not recognised by the Greek *κοροπλάσται*, but that the same type of figure might be used either for a votive offering to a deity, or as a mere ornament or article of tomb-furniture. And we are further met with the fact that a type which was mythological at one period ceases to be so at another, or at any rate is transformed by some slight alteration of details or omission of an attribute. Thus the seated figure of an Earth-goddess or Nursing-mother of a Rhodian or Cypriote tomb becomes the nurse and child of the fourth century at Tanagra, while the archaic standing type of a Persephone holding a flower requires little but the omission of her special head-dress to transform her into the girl-type of the Hellenistic age.

The earliest beginnings of the statuette proper show, as might be expected in primitive Greek art, a very limited range of ideas. As in marble, bronze, and wood, so also in clay, the type of the female deity reigns supreme. The primitive Hellenic type of goddess adopts two forms, both derived from an original in wood, the board-form or *σανίς*, and the column-form (*κίων* or *ξόανον*), each of which finds parallels in sculpture. The limbs are either completely wanting or of the most rudimentary description, the figure terminating below in a spreading base. Both these types are found in Rhodes, but on the mainland of Greece the columnar form is confined

ARCHAIC GREEK TERRACOTTAS (BRITISH MUSEUM).

1, MAN WITH RAM (RHODES); 2, PERSEPHONE (SICILY); 3, RHODES; 4, DOLL (ATHENS).

to the Mycenaean period. In the succeeding "Geometrical" age the board-like types rose into popularity at Athens and Tegea, and above all in Boeotia. Two varieties are found, a standing and a sitting type, and they are usually painted in the manner of the local vases (see p. 290). The later examples show a great advance in modelling, especially in the heads. The columnar form exhibits its development best in the terra-cottas of the Graeco-Phoenician period from Cyprus.

The standing and sitting goddess (Plate VIII.) are the two principal types in archaic Greek art, and are remarkable for their wide distribution and universal popularity. The name of the goddess may vary with the locality, but the types remain almost identical, and the attributes show little variation.

Another interesting archaic type is the so-called funeral mask or bust (Plate VIII.), of which the best examples have come from Rhodes. Being almost exclusively feminine, we must suppose that they ceased to represent the image of the dead person, as in Egypt and primitive Greece, and became images of the Chthonian goddess, Demeter or Persephone, represented under the form of a bust rising out of the earth.[1] Thus they played in the tombs the rôle of protection against evil influences, like the mask of Demeter Kidaria, worn by the priest at Pheneus in Arcadia on certain occasions.[2] Male masks are occasionally found, representing the Chthonian Dionysos. They are very rare after the fifth century.

The purely divine and mythological types in the archaic period are very few in number. Of the Olympian deities few are represented, except in the conventional hieratic types, hardly to be differentiated one from another. But on certain sites are found representations of nature-goddesses, such as the Earth-mother with a child in her lap (Gaia Kourotrophos), or a nude goddess within a shrine, who may be a combination of Astarte and Aphrodite. These types are of Oriental origin, and are found in Cyprus, Rhodes, Naukratis, and Sardinia. They may represent offerings made after child-birth. Among the individualised deities we may point to figures of Hermes

[1] Cf. the types on painted vases, Vol. II. Chapter XII. (Eleusinian deities).

[2] Paus. viii. 15, 3.

Kriophoros (from Rhodes and Sicily),[1] of Herakles,[2] or of the local nymph Kyrene, who appears holding the silphium-plant in a terracotta from Carthage.[3]

Among miscellaneous feminine types are the *hydrophoros* or water-carrier, the woman riding on a mule, horse, or other animal, the musician, and the mother nursing a child. Some of these have their mythological counterparts, as in the Aphrodite riding on a goose, or the Earth-mother, already mentioned. Male types are curiously rare, the athletic influences, which are so strongly manifest in early Greek sculpture, not affecting terracottas. The most popular is that of the horseman, particularly in Cyprus. These figures are usually of a rude and primitive kind, especially in Cyprus and at Halikarnassos. The examples from Greece Proper show a more developed archaism, and are found at Athens and in Boeotia. Sometimes instead of a horse the man rides on a swan, mule, or tortoise.

Reclining male figures are sometimes characterised as Herakles or a Satyr; but this type is most fully developed at Tarentum, in numerous terracottas representing the well-known subject of the Sepulchral Banquet, associated with a cult of the Chthonian deities.[4] There are also various types of grotesque figures, usually in a squatting or crouching attitude; some assume the form of a Satyr, and others are obviously derived from the Egyptian figures of Ptah-Socharis, with bent knees and protruding stomach.

In the fine and later periods, from the end of the fifth century onwards, the standing or seated feminine figures are still by far the most prominent. The change, however, which has taken place, from mythological to *genre*, has been described as an evolution rather than a revolution, brought about by artistic, not religious, considerations. The possible varieties of the feminine standing types may be best studied in the Tanagra figures (Plate IX.), which include women or girls in every variety of pose or attitude. In most cases the arms are more or less concealed by the himation, which is drawn closely

[1] B.M. B 258, 410.
[2] B.M. B 256, 286, 335.
[3] B.M. B 359: cf. p. 344.
[4] *J.H.S.* vii. p. 9 ff.

GREEK TERRACOTTAS OF HELLENISTIC PERIOD (BRITISH MUSEUM).

1, 4, TANAGRA; 2, 3, SOUTHERN ITALY.

across the figure; in others a fan, mirror, wreath, or mask is held in one hand, the other drawing the edges of the drapery together. Some lean on a column or are seated on a rock; others play with a bird or perform their toilet. Imitations of the Tanagra figures, but vastly inferior in merit, subsequently became popular all over the Greek world; they are found at Myrina in Asia Minor, in Cyprus, the Cyrenaica, and many parts of Southern Italy.

Among miscellaneous types of the Hellenistic period, many of the archaic ones already mentioned retain their popularity. Others appear for the first time, and are more in accordance with the spirit of the age, such as girls dancing, playing with knucklebones, or carrying one another pick-a-back. There is a beautiful group of two knucklebone-players from Capua in the British Museum (D 161). The dancing type is found widely distributed.

Figures of goddesses and mythological subjects are very rare at Tanagra, but fairly common on other sites, as at Myrina and Naukratis. Archaistic imitations of the archaic seated and standing goddesses are often found in the Cyrenaica and Southern Italy; but the Chthonian deities appear but rarely among the types of more advanced style. As in sculpture and vase-paintings, Aphrodite now becomes the most prominent among the feminine deities, and some of the later statuettes appear to be reproductions of well-known works of art, the Cnidian Aphrodite, the Anadyomene, or the crouching type of Aphrodite at the bath. Artemis and Athena are occasionally found, but Nike (Victory) is really the most popular figure after Aphrodite. She, however, plays little more than the part of a female Eros, a counterpart to whom the Hellenic artist felt to be a necessity. Formerly these winged female types were styled Psyche, but this was a conception of post-Hellenistic origin.

Among the male deities the conditions remain much as before. Zeus appears for the first time, and was especially popular at Smyrna, and Sarapis and Asklepios are also occasionally found. In Naukratis the influence of the Egyptian religion made itself felt in the production of numerous figures of Bes, Harpocrates,

and the like. Hermes is not found so often as might have been expected, though there is a notable instance in the British Museum (C 406) of a caricature of the famous statue by Praxiteles, where a Satyr takes his place. Dionysos is only met with occasionally, as are Satyrs and Maenads; but masks of a Bacchic character are very common in Italy.

The one deity who really seems to have caught the popular taste is Eros, although at the time when most of the Tanagra statuettes were produced this popularity was hardly assured. The types of Eros standing, seated, flying, or riding on animals are innumerable and found all over the Greek world. The best examples come from Eretria in Euboea, but Myrina and Sicily have also produced large numbers. They vary from almost Praxitelean conceptions, like the Flying Eros from Eretria in the British Museum (C 199), to the veritable Pompeian *amoretti* from the same site and from Myrina. The riding types of Eros (on a horse, dog, swan, or dolphin) are chiefly found in the Cyrenaica or Southern Italy. In many cases the Eros types are used for ordinary unwinged boys.

Among the human male types a new feature is the introduction of the athlete, as he appears in many boyish figures from Tanagra, and later as a boxer among the somewhat coarse conceptions of the Roman period. Some years ago a remarkable copy of the Diadumenos of Polykleitos in terracotta was found in Asia Minor.[1]

In the tombs of the Aegean Islands, Italy, and elsewhere, a class of ware has sometimes been found quite distinct from the ordinary fictile pottery and resembling the porcelain or enamelled ware of the Egyptians and Babylonians, such as the *ushabtiu*, found in the tombs of the former, and the enamelled bricks of the latter. For the most part they must be regarded as importations, of foreign manufacture, the medium of commerce being the Phoenicians, who not only introduced Egyptian objects of art, but themselves endeavoured to imitate them. Hence we must distinguish some as of Egyptian origin, others as made by the Phoenicians. As might be expected,

[1] *J.H.S.* vi. pl. 61.

they are most often found where Phoenician influence was strong, as in Rhodes and Sardinia. Egyptian perfume-vases have been found in the Polledrara tomb at Vulci (see Chapter XVIII.) and may be dated by the accompanying scarabs of Psammetichus I. as belonging to the end of the sixth century.

But these are by no means the earliest examples. In the Bronze Age tombs of Cyprus occasional finds have been made of plates of blue porcelain or faïence, with Egyptian designs going back to the eighteenth dynasty[1]; and for several centuries other Egyptian objects in porcelain, or with enamelled glaze, continue to be found in the tombs of Cyprus, Rhodes, and Greece. And there is also a considerable quantity of such wares which is not Egyptian in character, although it may be to some extent imitative, and therefore demands notice. Of this the most remarkable examples are the *rhyta*, or drinking-horns, found at Enkomi in Cyprus, in 1896, and now in the British Museum.[2] The two finest specimens are in the form of a female head surmounted by a cup (Plate X.) and a ram's head respectively. Although found in tombs with Mycenaean objects, and therefore presumably of early date, the style and modelling are so far advanced—so purely Hellenic—that they may be compared with archaic work of the sixth century B.C. or even later.

In the tombs of Kameiros in Rhodes,[3] along with Egyptian porcelain objects, were found many vases of this ware, of apparently Greek workmanship. This is further implied by the presence in one tomb of a figure of a dolphin with a Greek inscription: ΠΥΘΕΩ ΕΜΙ, "I belong to Pythes."[4] It is quite conceivable that the Greeks of Rhodes (as of Naukratis: see below) knew and practised Egyptian methods. The finds include small *alabastra* with friezes of men and animals in relief, and flasks of a compressed globular shape similarly ornamented; also *aryballi* of various moulded forms, such as animals or helmeted heads (Plate X. fig. 3). The vase in the form of

[1] Cesnola, *Cyprus*, p. 102; *B.M. Excavations in Cyprus*, p. 35, fig. 63.

[2] *B.M. Excavations*, p. 22, pl. 3.

[3] See Pottier, *Louvre Cat.* i. p. 150; Dumont-Pottier, i. p. 193; Perrot, *Hist. de l'Art*, iii. pl. 5.

[4] Roberts, *Gk. Epigraphy*, i. p. 192.

a head seems to be an early Phoenician idea; and this particular type of the helmeted head seems to have been adopted subsequently by Ionian artists in the Clazomenae sarcophagi.[1] Similar vases and figures have been discovered in the tombs of Melos, Corinth, Cervetri, and Vulci, and also in Syria and at Naukratis in Egypt.[2] Others again from the tombs of Kameiros and Vulci take the form of jars of opaque glass ornamented with zigzag patterns in white and dull crimson on a greenish ground.[3] A specimen of somewhat similar ware was found in a Bronze Age tomb at Curium, Cyprus, in 1895,[4] consisting of a tall funnel-shaped beaker of blue and yellow glazed ware with an edging of dark brown (Plate X.). The technique is superior to that of the later examples, and more on a level with that of the porcelain *rhyta* from Enkomi.

In Greece Proper there are altogether few traces of this enamelled ware, and after the sixth century B.C. it quite disappeared. But some very fine specimens have been found in the tombs of Southern Italy. A jug with delicate ornamentation in blue and white came from Naples, and a similar vase from the same site, but shaped like a *kalathos* and of a pale green colour, is now in the British Museum. Objects of this ware have also been found on the site of the ancient Tharros in Sardinia. Their glaze was a pale green, like that of the twenty-sixth dynasty wares, and with them was found a scarab of Psammetichus I, which shows them to be contemporaneous with the objects found in the Polledrara tomb. But the strong Phoenician element in Sardinia is sufficient to indicate that these fabrics are all of Egyptian importation.

In the Hellenistic period, when vase-painting had reached its latest stages, the fashion of glazed enamelled ware was revived; its chief centre was Alexandria, which would naturally have

[1] Cf. *J.H.S.* iv. p. 11. Heuzey, however, thinks that the Phoenicians imitated the Greek painted examples of this time (such as A 1117 ff. in B.M.). Cf. *Gaz. Arch.* 1880, p. 159.

[2] Good examples are given in Perrot, *Hist. de l'Art*, iii. p. 676; *Gaz. Arch.* 1880, pl. 28 (in Louvre, from Corinth); *Ath. Mitth.* 1879, pl. 19: cf. also Berlin 1288-91, and many examples in B.M. (First Vase Room). On one from Kos was found the name of Apries (599—569 B.C.). See also *Naukratis I.* pl. 2, figs. 6-18.

[3] Perrot, *Hist. de l'Art.* iii. pl. 6.

[4] *B.M. Excavations*, p. 69, fig. 99.

PORCELAIN AND ENAMEL-GLAZED WARES (BRITISH MUSEUM).

4, 6, CYPRIOTE BRONZE AGE; 3, ARCHAIC GREEK (RHODES); 1, 2, 5, GRAECO-ROMAN PERIOD.

carried on the traditions of Egyptian porcelain or faïence. Specimens of glazed ware with reliefs or modelled in various forms have been found at Naukratis and in the Fayûm, including a fine blue porcelain head of a Ptolemaic queen (Plate X.). In a tomb at Tanagra were found a beautiful *askos* in the form of a duck on which Eros rides, and another porcelain vase,[1] evidently imported from Alexandria, or some other industrial centre of Hellenised Egypt. Porcelain jugs, inscribed with the names of Arsinoe, Berenike, and one of the Ptolemies, have been found at Benghazi in North Africa, at Alexandria, and at Canosa in Southern Italy.[2] They are of blue ware, with reliefs of Greek style attached. Fragments of the same kind dating from the first century B.C. were found at Tarsos in Cilicia,[3] and in the Louvre there are glazed wares covered with yellow or green enamel from Smyrna and Kyme. The British Museum possesses similar vases from Kos and elsewhere, with wreaths and similar patterns in relief (Plate X.), but these are not earlier than the Roman period. Enamelled wares of early Roman date have also been found on the Esquiline, and the ware is common at Pompeii.[4]

It does not appear that the manufacture of these enamelled wares was confined to one spot; they are found all over Asia Minor, Italy, and Gaul, and in other countries bordering on the Mediterranean. It seems probable, however, that there were three principal centres of the fabric, at least in the Roman period. The first of these was in Asia Minor, or the islands along its coasts, whence came the specimens found at Tarsos, in Ionia, and in the islands such as Kos. These are mostly small vases, of metallic form, especially in the treatment of the handles (cf. Plate X., fig. 5), the colour being usually a bluish green, though some examples are more polychromatic. These seem to have been exported to Italy, and *viâ* Marseilles to Gaul. Next, there are the wares made at Alexandria, of which

[1] Furtwaengler, *Coll. Sabouroff*, i. pl. 70, fig. 3 (with text); Rayet and Collignon, p. 374.

[2] See *Journ. des Savans*, March 1862, p. 163; *Rev. Arch.* vii. (1863), p. 259 (name of Ptolemy wrongly read as Kleopatra); *Arch. Zeit.* 1869, p. 35; Rayet and Collignon, p. 372.

[3] *Gazette des Beaux-Arts*, Nov. 1876, p. 385 ff.

[4] Von Rohden, *Terracotten von Pompeii*, p. 29.

the vases described above are examples. And, thirdly, there was a Gaulish fabric, which must probably be located at Lezoux in the Auvergne (see Chapter XXIII.), examples from which are found at Vichy, in the Rhone Valley, and at Trier and Andernach in Germany.[1] Fragments of this ware are even reported to have been found in England—as, for instance, at Ewell in Surrey, at Colchester and Weymouth.[2] These are of grey clay with yellow, green, or brown glaze, with ornaments of leaves, vine-branches, or scrolls, stamped in moulds; the shapes are jugs, flasks, or two-handled cups. A later variety is of white clay with a malachite-green glaze, the forms being again of a metallic type, and towards the end of the period imitations of glass with *barbotine* decoration (see Chapter XXIII.) appear. These two groups cover the first century after Christ.

Sometimes the ornamentation of the later glazed wares from Italy takes the form of small reliefs (*emblemata*), made separately and attached before the glaze was applied, and there are two or three specimens of this class in the British Museum. It was also not infrequently used for lamps, which, apart from the glaze, have all the characteristics of the ordinary kinds, and even for figures of gladiators, boats, and other objects. The glaze is of a thick vitreous character, and was not improbably produced by lead; at all events a French writer[3] maintains, in opposition to the views of Brongniart and Blümner, that by a study of this ware he has established a knowledge of lead-glaze among the ancients.[4]

[1] Hettner in *Festschr. für J. Overbeck*, p. 169.

[2] *Archaeologia*, xxxii. p. 452 (Ewell); British Museum, Romano-British Room, Case H.

[3] Mazard, *De la connaissance par les anciens des glaçures plombifères*; cf. Blümner, *Technol.* ii. p. 89.

[4] On the subject generally see Dumont-Pottier, i. chap. xiii.; Rayet and Collignon, p. 365 ff.; Daremberg and Saglio, *s.v.* Figlinum, p. 1131; and for the Graeco-Roman enamelled wares, *Bonner Jahrbücher*, xcvi. p. 117, and Mazard, *op. cit.*, where a full description and list of examples is given.

CHAPTER IV

USES AND SHAPES OF GREEK VASES

Mention of painted vases in literature—Civil and domestic use of pottery—Measures of capacity—Use in daily life—Decorative use—Religious and votive uses—Use in funeral ceremonies—Shapes and their names—Ancient and modern classifications—Vases for storage—Pithos—Wine-amphora—Amphora—Stamnos—Hydria—Vases for mixing—Krater—Deinos or Lebes—Cooking-vessels—Vases for pouring wine—Oinochoe and variants—Ladles—Drinking-cups—Names recorded by Athenaeus—Kotyle—Skyphos—Kantharos—Kylix—Phiale—Rhyton—Dishes—Oil-vases—Lekythos—Alabastron—Pyxis—Askos—Moulded vases.

THOSE who are acquainted with the enormous number of painted vases now gathered together in our Museums, showing the important part they must have played in the daily life of the Greeks and the high estimation in which they were clearly held, as evidenced by the great care bestowed on their decoration and the pride exhibited by artists in their signed productions, may feel some surprise that so few allusions to them can be traced in classical literature. Such passages as can be interpreted as referring to them may actually be counted on the fingers of one hand, and even these are but passing allusions; while any full descriptions of vases, such as that in Theocritus' first Idyll or some of those in Athenaeus' Book XI., almost invariably refer to metal vases with chased designs. Nor can we trace any reference to known potters or artists in literature or documents, save in a few inscriptions recently found at Athens, which are, of course, of secondary importance for literary history.

More general allusions to pottery and its use in daily life are common enough, and it would hardly be profitable to quote all

such passages in detail; many indeed, such as the early allusion to the potter's wheel in the *Iliad* (see p. 207), have found a place elsewhere in this work. The passage of Homer at all events supplies proof, if such were needed, that the use of the wheel was known in early times in Greece.

Of undoubted references to painted vases there are but two, though both of them are particularly interesting, as they refer to well-known special classes of Attic vases. The earlier of the two is in Pindar's tenth Nemean Ode,[1] in which he celebrates the victory of Thiaios of Argos, who had twice been successful in the Panathenaic games at Athens. He says:

γαίᾳ δὲ καυθείσᾳ πυρὶ καρπὸς ἐλαίας
ἔμολεν Ἥρας τὸν εὐάνορα λαόν, ἐν ἀγγέων ἕρκεσι παμποικίλοις.[2]

These prize-vases are also mentioned by Simonides of Keos:

καὶ Παναθηναίοις στεφάνους λάβε πέντ' ἐπ' ἀέθλοις
ἑξῆς ἀμφιφορεῖς ἐλαίου.[3]

The other passage, from the *Ecclesiazusae* of Aristophanes (l. 996), is equally well known. One speaker, in somewhat contemptuous terms, alludes to "the fellow who paints the lekythi for the dead":

ὃς τοῖς νεκροῖσι ζωγραφεῖ τοὺς ληκύθους.[4]

These lekythi may with certainty be identified with the white Athenian variety decorated with appropriate subjects and made specially for funerals (see Chapter XI.). The best examples of this class belong to the very period at which the *Ecclesiazusae* was written (392 B.C.), but most of them show signs of being hastily executed or made to be sold at a low price. It is probably for this reason that the speaker implies his contempt

[1] L. 64.

[2] "And in earthenware baked in the fire, within the closure of figured urns, there came among the goodly folk of Hera the prize of the olive-fruit" (Myers).

[3] "And he won five garlands in succession at the Panathenaic games, amphorae full of oil" (Frag. 155, *ed.* Bergk = *Anth. P.* xiii. 19). See also Schol. *in* Ar. *Nub.* 1005, and *Inscr. Gr.* (*Atticae*), ii. 965*b*.

[4] Cf. Schol. *in* Plat. *Hipp. Min.* 368 C: Λήκυθον δὲ ἀγγεῖόν τι φασὶν οἱ Ἀττικοὶ ἐν ᾧ τοῖς νεκροῖς ἔφερον τὸ μύρον.

for the painter, although at the same time it seems likely that vase-painters, like all craftsmen, were looked down upon by the Athenians of that day, in spite of the real beauty and artistic merit of their productions.

One or two doubtful allusions must next be considered. The lyric poet Alcaeus, who flourished 610—580 B.C., seems to allude to painted vases, but the reading is very doubtful. The passage is read by Bergk as follows (*Poet. Lyr. Graec.* iii. p. 165, frag. 41):

> καὶ δ' ἄειρε κυλίχναις μεγάλαις, αἴτ' ὅτι, Οἶκι, λαῖς·
> . . . ἔγχεε κίρναις ἕνα καὶ δύο
> πλέαις κὰκ κεφάλας, ἁ δ' ἀτέρα τῶν ἀτέρων κύλιξ
> ὠθήτω.[1]

Ahrens[2] read *αἶψα ποϊκίλαις* for *αἴτ' ὅτι, Οἶκι λαῖς*, and other versions have been suggested. Bergk's reading is very uncouth, and it certainly seems as if *ποικίλαις* was intended, whatever the preceding word. If it is allowed to stand, it obviously implies *painted* vases, as in the *παμποικίλοις* of Pindar.

In the speech of Demosthenes *De Falsa Legatione* (p. 415) occurs a passage which is generally taken as having reference to painted vases: *καὶ σύ, Φιλόχαρες, σὲ μὲν τὰς ἀλαβαστοθήκας γράφοντα καὶ τὰ τύμπανα*, "And you, Philochares, who paint the alabastos-stands and the pediments." The word *ἀλαβαστοθήκη* is commonly supposed to describe a stand with holders for pots of perfume (also called *κέρνος*, see below, p. 195), although most painted examples of this vase found in Greece are of very early date. The *τύμπανα* are more easy of explanation, being the triangular pediments of temples, which, like the metopes of the so-called Theseion at Athens and those at Thermon (p. 92), were no doubt often adorned with paintings in place of sculpture.

Other passages, if they do not actually refer to painted or even to fictile vases, are at least of value as giving information as to the current names for those in every-day use, or as to various purposes for which they were used Reference will be made to many of these in the course of the chapter.

[1] "And raise the great goblets, or if, Oikis, thou desirest aught else . . . pour in and mix one and two full up to the brim, and let the one goblet oust the other."

[2] *Graec. Ling. Dialect.* i. p. 247.

Suetonius in his Life of Caesar (§ 81) describes how the colonists who were sent out under the *Lex Julia* to build new houses were destroying ancient tombs for the purpose when they came upon remains of ancient pottery (*aliquantum vasculorum operis antiqui*), the discovery of which caused them to redouble their efforts in the work of destruction. Similarly Strabo[1] tells us that when Julius Caesar sent colonists to rebuild Corinth they came upon tombs containing large quantities of ὀστράκινα τορεύματα, which they nicknamed "Necrocorinthia." The meaning of this expression is somewhat doubtful, but the word τορεύματα seems to imply chased or relief work, and it is probable that these were not painted vases, but Hellenistic ware with reliefs, like the so-called Megarian bowls.[2] The latter can be identified, by means of their subjects, with the *scyphi Homerici* of which Nero was so fond; Suetonius tells us that they were so named *a caelatura carminum Homeri*, from the subjects from Homer's poems carved in relief upon them.[3] The *scyphi* were doubtless of metal, the use of which was confined to the wealthy and luxurious, while the so-called Megarian bowls and similar ware were copied from them in the cheaper material for the use of the humbler classes.

We see, then, that classical literature throws but little light on the uses made of painted vases as such by the Greeks. But we are by no means ill supplied with information as to the uses of pottery in general, about which evidence may be obtained both from the vases themselves and from innumerable passages in ancient writers or the commentaries of the scholiasts and lexicographers. This question is more or less bound up with that of the different shapes and names of vases, of which some 150 have been handed down by Athenaeus, Pollux, and other writers, and these will be considered in detail subsequently. For the present it may suffice to say a few words on what is known of the use of pottery in general and of painted vases in particular.

As most of the vases hitherto known have been discovered in

[1] viii. 381: see also p. 50.

[2] See p. 499.

[3] Suet. *Ner.* 47: see Robert, *Homer. Becher*, and *Class. Review*, 1894, p. 325. The British Museum possesses a silver phiale, with terracotta replicas (G 117, 118), one of which is shown on Plate XLVIII. See also p. 500.

tombs, it would at first sight appear that they were exclusively destined for sepulchral purposes; but this seems to have been in many cases only a subsequent use of them, and they doubtless also found a place among the wants of daily life. That this is true of the plain unglazed or unpainted pottery goes indeed without saying; in regard to the painted vases the question is, in view of the scanty literary evidence, more difficult to decide.

As the civil and domestic use of pottery is the most important, it is necessary to consider it first. For ordinary purposes earthenware largely took the place of bronze and the precious metals, just as it does at the present day. One instance of this we have already quoted in speaking of the "Homeric bowls," and others might be cited, in particular its use for measures, for which metal would naturally be employed as a general rule. This usage is established by the occasional discovery of vases inscribed with the names of measures and the like. The British Museum possesses a small one-handled cup of black glazed ware (F 595 = Fig. 14) found in the island of Cerigo (Kythera), on which is incised in fifth-century lettering the word HEMIKOTVAION, *ἡμικοτύλιον*, or "half-kotyle." The word *κοτύλη* is interesting as denoting not only a shape of a drinking-cup (see below, p. 184), but a Greek measure, equivalent to about half a pint. Again, in 1867, a cylindrical vase of red ware was found at Athens inscribed ΔHMOΣION, *δημόσιον*, or "public (measure)."[1] It was stamped with the figure of an owl and an olive-branch, the official seal of Athens, and has been supposed to represent the *χοῖνιξ* or quart, its capacity having been estimated at 0·96 litres,

FIG. 14. HEMIKOTYLION (VASE USED AS MEASURE). BRITISH MUSEUM.

[1] Cf. the use of the word *δημόσιον* on bronze and lead weights.

or 1¾ pints, while the χοῖνιξ is generally reckoned as equivalent to 1 litre.[1]

Many of the names in common use for shapes of vases are also found applied to measures of capacity either for liquid or dry stuffs; and it is possible that herein lies the explanation of the somewhat puzzling *graffiti* inscriptions found under the feet of Attic vases (see Chapter XVII.), where the words used seem to have no relation to the vase itself. Thus in liquid measure the amphora (ἀμφορεύς) or κάδος, also known as μετρητής, was equivalent to about 7½ gallons, and was divided into 12 χόες, the χοῦς into 12 κοτύλαι, which, as we have seen, answer to our ½-pints. The ὀξύβαφον was one-fourth of a κοτύλη, the κύαθος one-sixth.[2] All these words were in common use to express various forms of vases, as will be seen later on. Further, the word κεράμιον, which, like the Latin *testa*, is used generally for pottery, has a more restricted sense of a cask or vessel used for transporting wine, and is even used as a term of measure, presumably equivalent to the amphora.[3]

Earthenware was also used generally for the purpose of storing liquids or various kinds of food, for the preparation of food and liquids, and for the uses of the table or toilet. The painted ware, however, was not employed for the commoner purposes, nor to contain large quantities of liquids, for which it would have been far too expensive. But we know that it was largely used at banquets and drinking-bouts, and on other occasions, from the evidence of the vases themselves. Thus, in the well-known vase with the Harpies robbing the blind Phineus of his food (p. 357), a kotyle painted with black figures is seen in the king's hands; and in a scene representing the reception of Paris by Helen,[4] the former is offered wine drawn from a large four-handled vase on which figures are painted.[5] Vases with subjects represented on them are also seen placed on columns forming the background of scenes, as if forming part of the furniture of a hall or chamber. But as a general rule the vases

[1] Egger in *Revue Archéol.* xvi. (1867), p. 292.

[2] See Hultsch, *Metrologie*, p. 99 ff.

[3] Arist. *Categ.* 12; also Polybius, iv. 56, ἡτοίμασαν οἴνου κεράμια μύρια.

[4] B.M. F 175.

[5] Other instances are: Millingen-Reinach, 2; Munich 423; Reinach, i. 291-92.

represented in banquet scenes and elsewhere are left plain or only decorated with patterns.

To the use of vases in connection with athletic games we have already alluded in discussing Pindar's mention of the Panathenaic amphorae; it is, of course, likely that other forms of vases were also given as prizes or presented to young men on special occasions, such as entering the ranks of the ἔφηβοι or being married, but we have no evidence of such customs.

Vases were also used as toys, as is proved by the discovery of

FIG. 15. CHILD PLAYING WITH JUG (BRITISH MUSEUM).

many little vases, chiefly jugs, in the tombs of children at Athens, on which are depicted children playing at various games.[1] They are too small to have served any other purpose, and as similarly shaped jugs appear among the toys used by the children in these scenes, it is reasonable to suppose that they were playthings. No doubt some of the more unusual shapes were made with the same end, such as vases in the shape of animals or fruit, or the aski (p. 200), which contained little balls and were used as rattles.

We have already hinted at the purely decorative use of vases

[1] Cf. B.M. E 534-37, 548-53; also Stackelberg, *Gräber der Hellenen*, pl. 17. Fig. 15 is from the vase F 101 in the British Museum.

as domestic ornaments, in which capacity they were often placed on columns; there is, however, no hint of this in ancient authors. But that it was customary in Greece and Italy, at all events in the later period (*i.e.* after the Persian Wars), seems to be indicated by the practice which obtains with the larger vases of executing only one side with care, while the other exhibits an unimportant and badly painted design (generally three boys or men wrapped in mantles). It is natural to suppose that the carelessly executed side was not supposed to be seen, owing to the fact that the vase was intended to be placed against a wall. Some of the large round dishes of Apulian fabric seem to have been intended for hanging up against a wall, on the same principle.[1]

The question which next arises is that of the extent to which vases were used for religious and votive purposes. Here, however, with one exception noted below, we derive little aid from a study of the painted vases themselves, in spite of the frequency of mythological subjects. But inasmuch as many instances are known of offerings of metal vases in the temples of the gods, it can hardly be doubted that painted vases served the same purpose for those who could only afford the humbler material. It was at one time supposed that the large vases painted for a front view only, of which we have just spoken, were destined for this purpose; but as they are mostly found in tombs, this can hardly be the case.

Of late years, however, much light has been thrown upon this question by means of scientific excavations. On many temple-sites which have been systematically explored, such as the Acropolis of Athens or Naukratis in the Egyptian Delta, enormous numbers of fragments of painted vases have been found which are clearly the remains of votive offerings. It was a well-known Greek custom to clear out the temples from time to time and form rubbish-heaps of the disused vases and statuettes, sometimes by digging pits for them; and thus these broken fragments, rejected from their apparent uselessness, have from these very circumstances been preserved to the present day to cast a flood of light on many points of archaeology. At Naukratis

[1] Cf. B.M. F 457-66.

many of the fragments bear incised inscriptions in the form of dedications to Apollo (Fig. 16) or Aphrodite, according to the site on which they were found. At Penteskouphia near Corinth a large series of early painted tablets, with representations of Poseidon and inscribed dedications, were found in 1879 (p. 316), and illustrate the practice of making offerings in this form, mentioned by Aeschylos.[1] Tablets painted with figures and hung on trees or walls are not infrequently depicted on red-figured vases, the subject generally implying their votive character.[2] Fig. 17 represents a youth carrying a tablet of this kind.

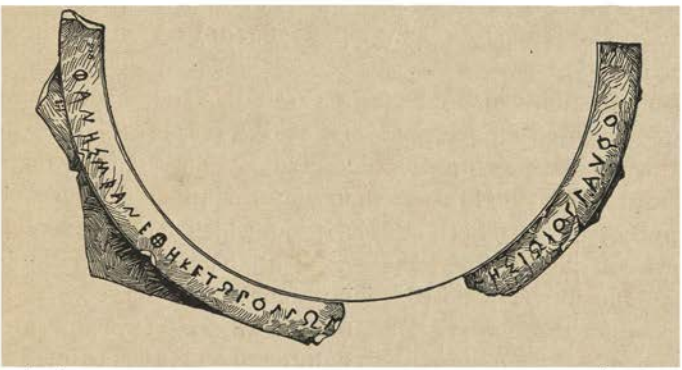


FIG. 16. RIM OF VASE FROM NAUKRATIS WITH DEDICATION TO APOLLO (BRIT. MUS.).

There is no doubt that vases (though not, perhaps, painted ones) must have played a considerable part in the religious ceremonies of the Greeks. In the Athenian festival of the Anthesteria, the second day was devoted to the holding of *ἀγῶνες χύτρινοι*, or "pot-contests," vessels full of corn being dedicated to Hermes Chthonios.[3] At the festival of the Gardens of Adonis flower-pots of earthenware containing flowers were cast into the sea, as a type of the premature death of Adonis.[4] These flower-pots were also placed on the tops of houses, and in this same festival, which was chiefly celebrated by hetairae, little terracotta figures (*κοράλλια*) were introduced.[5] The

[1] *Suppl.* 463.

[2] *E.g.* B.M. E 494. See also Chapter XV.

[3] See Schol. *in* Ar. *Ran.* 218, and *J.H.S.* xx. p. 110 ff.

[4] For explanation and parallels see Frazer, *Golden Bough*,[2] ii. p. 119 ff.

[5] Raoul-Rochette in *Revue Archéol.* viii. (1851), p. 112: see also Theocr. xv, 113 ff.

use of flower-pots placed in windows to form artificial gardens is mentioned by Martial and Pliny[1]; and they were also employed to protect tender plants, as hinted by Theophrastos,[2] who speaks of the necessity of propagating southernwood by slips in pots.

From Benndorf, *Gr. u. Sic. Vasenb.*
FIG. 17. YOUTH WITH VOTIVE TABLET.

It is, perhaps, hardly necessary to speak of the constant use of the jug and bowl (*phiale*) in sacrifices and libation scenes, as seen on innumerable vases of the R.F. and later periods (see pp. 178, 191). Fig. 18 shows the use of vases on the occasion of a sacrifice to Dionysos. There is also a type of vase which, according to a recent writer,[3] was used for burning incense. It is a form which hitherto had been conventionally named the *κώθων*, on account of its recurved lip (see below, p. 187); but it is pointed out that it had three feet (the form being clearly derived from the tripod), and therefore stood, and was not carried about; also that it varies much in size, and is found at an early date, and chiefly in women's graves.[4] There is also evidence that it was meant to stand fire or hold coals. From these details the conclusion is deduced that it represents the earlier form of incense-burner (down to about 500 B.C.), those of later

[1] *Revue Archéol. l.c.* p. 118; Mart. xi. 19; Pliny, *H.N.* xix. 59.

[2] *Hist. Plant.* vi. 7.

[3] Pernice in *Jahrbuch*, 1899, p. 60 ff. He would also regard the so-called *σμηματοθήκη* (see p. 198) as a vase of this class; but this seems much more doubtful. See also p. 167, under *πλημοχόη*.

[4] Cf. Böhlau, *Ion. u. Ital. Nekrop.* p. 39; Berlin 1108.

date being of a different form, as often seen on R.F. vases.[1]

The most important use, however, for which vases were

From *Furtwaengler and Reichhold.*

FIG. 18. VASES USED IN SACRIFICE (FROM VASE AT NAPLES).

employed, and that to which their preservation is mainly due, was for purposes connected with funeral ceremonies. These were of a varied nature, including the use of vases at

[1] Pernice's arguments have been directly impugned by Kouroniotes in *Ἐφ. Ἀρχ.* 1899, p. 233, and by Robinson in *Boston Mus. Report*, p. 73; and it certainly seems more probable that metal vessels would have been used for this purpose; moreover, the form of the *θυμιατήριον* is well known. But he has personally assured the present writer that the clay *κώθωνες* show traces internally of the use of fire.

the burial, the placing of them on the tomb to hold offerings, and the depositing of them in the tomb, either to hold the ashes of the dead or as "tomb-furniture," in accordance with the religious beliefs of the Greeks on the life after death. The principal methods in which they have been found deposited in the tombs have already been described in Chapter II.

Vases were employed in the burial rites in various ways, as we learn from the subjects depicted upon them. In the celebrated vase representing the death and funeral of Archemoros,[1] two persons are seen carrying tables laden with vases to the tomb, while an oinochoë is placed under the bier on which the corpse is laid. It is also probable that they were often burnt on the funeral pile with the corpse, and if this is the case it may account for the discoloured condition of many fine vases in which the red glaze has turned to an ashen grey under the action of fire.[2] In any case vases were often broken before being placed in the tomb, the idea being that they must participate in the death of the person to whom they were consecrated. There is a special class of B.F. amphorae found at Athens, which are commonly known as "prothesis-amphorae," the subjects relating exclusively to the *πρόθεσις* or laying-out, and other funeral rites. They were, therefore, probably placed round the bier during this ceremony.

Vases were also used for holding milk, oil, unguents, and other liquids which were poured upon the corpse, or for the lustral water placed at the entrance of the tomb. It was the regular practice of the Athenians to place vases on the outside of the tombs, the commonest forms being that of the lekythos, or a larger vase known as the *λουτροφόρος*, mentioned by Demosthenes.[3] These were, however, generally of stone, and are sometimes sculptured in relief, or bear inscriptions like the Attic stelae[4] and modern tombstones.

The custom of placing lekythi on tombs is also alluded to

[1] Reinach, i. 235 = Naples 3255.

[2] See p. 214.

[3] *Adv. Leoch.* 1086, 1089.

[4] Cf. *B.M. Cat. of Sculpture*, i. p. 297.

once or twice by Aristophanes in the *Ecclesiazusae*—*e.g.* line 538:

οὐδ' ἐπιθεῖσα λήκυθον,

and again, line 1032:

καὶ ταινίωσαι καὶ παράθου τὰς ληκύθους.[1]

The manner of employing vases as adjuncts to the tomb is nowhere better illustrated than on the Athenian white lekythi, which are almost all painted with funeral subjects, and, from the hasty way in which many are executed, show that they

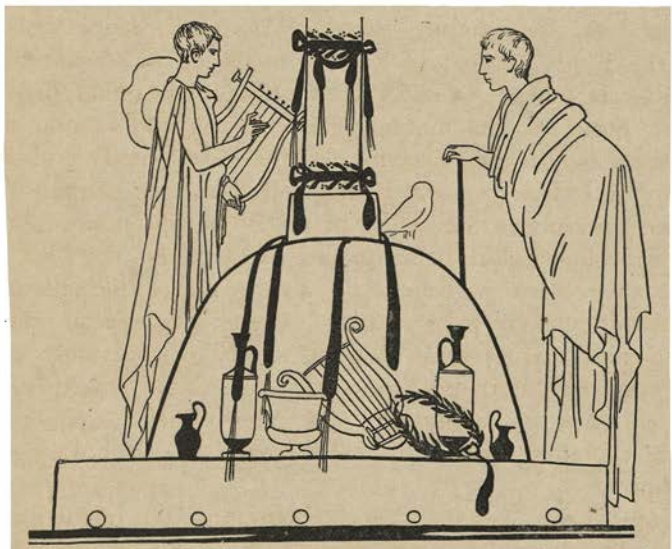


FIG. 19. FUNERAL LEKYTHOS, WITH VASES INSIDE TOMB (BRIT. MUS.).

were often made to order at short notice (see above, p. 132). In particular, one example in the British Museum (D 56 = Fig. 19) shows the interior of a conical tomb or tumulus, within which vases of various shapes are seen. In other examples they are ranged along the steps of a stele, or are represented as being brought to the tomb in baskets by mourning women.[2] The larger vases of Southern Italy, which

[1] See note on p. 132 above. The custom seems to have been specially in favour in the fourth century B.C.

[2] *E.g.* B.M. D 65, 70-1; *J.H.S.* xix. pl. 2. On the subject generally, see *ibid.* p. 169 ff.

similarly show by their subjects that they were only made for funeral purposes, bear a close relation to the white lekythi, and also to the Attic funeral stelae with reliefs. The treatment of the subject varies in the different fabrics, but two main types prevail. In the one, of Lucanian origin, the tomb takes the form of a stele or column, round which vases are ranged on steps[1]; in the other, on the large Apulian kraters and

FIG. 20. VASES PLACED ON TOMB (LUCANIAN HYDRIA IN BRIT. MUS.).

amphorae, the tomb is in the shape of a ἡρῷον or small temple, within which is seen the figure of the deceased, while on either side approach women bearing offerings (Fig. 106); but vases do not play an important part in these latter scenes.

Thirdly, we have to deal with the use of painted vases in the tomb itself. As regards their use as cinerary urns, to contain the ashes of the dead, it appears to have been somewhat restricted.

[1] Fig. 20 = F 93, a Lucanian hydria in the British Museum, is a very fine instance, several of the vases being represented with painted subjects. Among them is a Panathenaic amphora (see above, p. 132), on which is depicted a chariot-race.

In the Mycenaean period we know that inhumation, not cremation, was the practice, contrary to that of the heroic or Homeric age, in which an entirely different state of things is represented. But when we do read in Homer or the tragic poets, of the methods of dealing with the ashes of the dead, there is no mention of any but metal urns. Thus the ashes of Patroklos were collected in a *χρυσέη φιάλη*[1] (the word is probably used loosely), while those of Achilles were stored in a golden amphora.[2] Again, Sophokles, in the fictitious account of Orestes' death given in his *Electra*, uses the expression (l. 758)[3]:

ἐν βραχεῖ
χαλκῷ μέγιστον σῶμα δειλαίας σποδοῦ,

showing that metal vases were generally employed for this purpose.

No instances occurred among the early tombs in the Dipylon cemetery at Athens or elsewhere in Greece before the sixth century, nor was the practice usually favoured by the Etruscans, who employed painted vases in their tombs exclusively as furniture. In Mycenaean times in Crete coffers (*λάρνακες*) of terracotta, painted like the vases, were used as *ossuaria*[4]; and similarly in Etruria at all periods the remains of the deceased were placed in rectangular chests or sarcophagi of terracotta or stone. But in the earliest tombs of Etruria and Central Italy urns and hut-shaped receptacles for the ashes were invariably employed (see Chapter XVIII.).

It is, however, probable that in course of time there was a partial adoption of the practice in Greece. As early as the middle of the sixth century there is an instance in the well-known Burgon Panathenaic amphora, now in the British Museum,[5] found by Mr. Burgon in 1813; it contained remains of burnt bones and several small plain vases. This would seem to indicate that the Panathenaic amphorae in particular were considered appropriate for this purpose, namely, that

[1] *Il.* xxiii. 253. [2] Q. Smyrn. iii. 737.
[3] It no doubt suggested Tennyson's "Two handfuls of white dust, shut in an urn of brass." Cf. l. 1142 (*κύτει*).
[4] *Brit. School Annual*, 1901-2, pls. 18-19, p. 298; *Mon. Antichi*, i. p. 201, pls. 1-2.
[5] B 130: see also p. 46.

the cherished prize won by the living should be used for the most sacred purpose in connection with the dead.

Among the red-figured vases of the fifth century which have been found to contain ashes, may be mentioned the famous Vivenzio vase at Naples,[1] which was found carefully deposited within another vase at Nola, and a vase of the shape known as λέβης, now in the British Museum, found near the Peiraeus.[2] There is also a covered vase in the British Museum,[3] which was employed for a similar purpose. It is not, strictly speaking, a painted vase, being covered with a white slip and coloured like the terracottas, while the heads of monsters project from its sides; the shape is that known as λεκάνη ("tureen"), and it dates from the fourth century. It contained human bones, among which were found a small terracotta figure of a Siren and other objects; the jaw-bone, which was preserved, had still fixed in it the *obolos*, or small silver coin which was placed there as Charon's fare for ferrying the soul over the Styx. Of later date is a vase found at Alexandria, in the catacombs, similarly decorated, and also filled with bones; it was presented to the British Museum in 1830 by Sir E. Codrington.

The class of large terracotta vases found in tombs at Canosa, Cumae, Capua and Calvi (Cales), of which fine specimens may be seen in the Terracotta Room of the British Museum (see above, p. 119), seems to have been made for sepulchral purposes, as in many cases they are not adapted for practical use. On the other hand, they may have been ornaments for houses. They are decorated with figures in high relief, or attached to different parts of the vase, and many of them, especially those in the form of female heads, are strictly speaking not vases at all, having no proper bottom.

The majority of painted vases found in the tombs must be regarded purely as tomb-furniture, placed there with the idea that the deceased would require in his future life all that had been associated with his former existence. Sometimes they

[1] No. 2422 = Furtwaengler and Reichhold, pl. 34.

[2] E 811 : see for other instances, Jahn, *Vasensamml. zu München*, p. lxxxv, note 600, and p. 39 above.

[3] *Cat. of Terracottas*, C 12.

were placed round the corpse, with food or liquids in them for the use of the "ghost," and instances are known of eggs and other objects having been preserved in this manner.[1] Toy-vases are found buried with children in tombs at Athens and elsewhere, and toilet-boxes or unguent-vases in women's graves. Nevertheless, it is probably not wide of the mark to say that in the sixth and fifth centuries the custom had lost much of its original meaning; the habit of placing painted vases in tombs survived, but the original idea of the practice had become obscured, and the religious significance was restricted to certain classes of vases, the prothesis-amphorae, white lekythi, and others, which were not used during life but only made specially for this purpose.

Great value seems to have been set upon the painted vases by their possessors. When broken, they were repaired by the pieces being skilfully fitted and drilled, with a rivet of lead or bronze neatly attached to the sides. Several mended vases exist in the European collections.[2] Occasionally they were repaired by inserting pieces of other vases. Thus a vase with two handles, found at Vulci, of the shape called *στάμνος*, is repaired with a part of a kylix representing quite a different subject, and thus presents a discordant effect.[3] A R.F. vase in the Louvre has actually been mended with part of a B.F. vase.[4] A B.F. kylix in the British Museum (B 398) has a piece inserted with the name of Priapos; similarly the two handles of the R.F. kylix E 4, with the signature of Thypheithides, do not belong to the vase; but these may both be modern restorations. The large casks of coarse and unglazed ware (*πίθοι*) were also repaired with leaden cramps. "The casks of the ill-clad Cynic," says the Roman satirist, "do not burn; should you break one of them, another house will be made by to-morrow, or the same will

[1] Mr. J. L. Myres, on opening a tomb at Amathus, in Cyprus, in 1894, found jugs, bowls, and other kinds of vases ranged round the body, like a dinner-service set out on a table.

[2] A good instance is the Python krater in the British Museum (F 149), one of the handles of which has been repaired with lead. See also Jahn, *Vasens. zu München*, p. ci, note 731; B.M. B 607, B 608, E 106; Berlin 1768.

[3] Gerhard, *Auserl. Vasenb.* ii. 145 = Reinach, ii. 75.

[4] *Rev. Arch.* iii. (1904), p. 50.

continue to serve when repaired with lead."[1] Aristophanes puts into the mouth of his old litigant turned *roué* a popular story of Sybaris which alludes to the use of bronze rivets. A woman of that city broke an earthen pot, which was represented as screaming out, and calling for witnesses to prove how badly it had been treated. "By Persephone!" exclaims the dame, "were you to leave off bawling for witnesses, and make haste to buy a copper clamp (*ἐπίδεσμον*) to rivet yourself with, you would show more sense."[2]

After noting the chief uses of Greek vases it is necessary to give some account of the different shapes, and to identify the recorded names as far as possible with the various kinds actually found.

The subject is, however, one of great difficulty, and it is impossible to attain to scientific accuracy, owing to the differences of time between the authors by whom they are mentioned, the difficulty of explaining types by verbal descriptions, and the ambiguity often caused by the ancient practice of describing a vase of one shape by the name of another.

A study of any collection of Greek vases will make it apparent that there is a great variety in the forms of the different periods. This is especially marked in the earliest ages of Greece, in which the variety is almost endless, and the adoption and development of certain recognised forms practically unknown. It must therefore be evident that the statements of ancient writers must always be used with caution, and that a shape described by an early writer must not be taken as representing the same in a later period, even if the same word be used, or *vice versa*. For instance, the *δέπας ἀμφικύπελλον* of Homer, which finds a curious parallel in the gold cup with the doves discovered by Schliemann at Mycenae, is, whatever view we may take of the Homeric civilisation, only an example of a passing fashion. Or again, many of the drinking-cups described by Athenaeus in his eleventh book are doubtless only instances of new experiments in pottery or metal-work characteristic of the Hellenistic age, with its tendency to strive after novelties.

[1] Juvenal, xiv. 308.

[2] *Vespae*, 1437.

Many of his names are little more than nicknames for familiar shapes, which enjoyed a temporary popularity.

Some information may be derived from the vases themselves by means of inscriptions, specimens of which are given in Chapter XVII. Thus on the François vase the three-handled pitcher used by Polyxena is inscribed ΥΔΡΙΑ, or "water-pot," and enables us to apply the name hydria with certainty to a three-handled vase, of which many black- and red-figured specimens exist.[1] Then we have the *lekythos* of Tataie, and the *kylikes* of Philto and Kephisophon,[2] which testify by inscriptions to the name by which they were known. The names incised in *graffito* on the feet of vases[3] are a more doubtful source of evidence, inasmuch as they may refer either to mixed batches of vases or to the names of measures of capacity.

Examples of cursory mention of names in the ancient writers, such as Aristophanes, are innumerable, but seldom explicit, and the scholia on these writers are hardly more useful, inasmuch as the grammarians probably knew little more about obsolete shapes than we do ourselves, and their commentaries have little critical weight. The *loci classici* on the subject are the book of Athenaeus already referred to,[4] in which he gives a list of over one hundred names, with more or less full explanation and commentary, most of the forms being apparently varieties of drinking-cups, and the *Onomasticon* of Pollux.[5] Notices of vases are also to be found in the lexicographers, such as Hesychius and Suidas, and the *Etymologicum Magnum.*

In the early days of modern archaeology the first to propose an identification of the shapes of vases was Panofka,[6] whose fanciful and uncritical lucubrations were shortly afterwards combated by Letronne[7] and Gerhard,[8] the latter of whom

[1] The use of this form of vase is further illustrated by the *hydrophoria*-scenes on B.F. vases, in which it constantly occurs. See below, p. 166.

[2] B.M. A 1054, B 450; Boeckh, *C.I.G.* i. 545.

[3] See Chapter XVII., where examples are given.

[4] Cf. also Bk. v. 198 ff.

[5] x. 62 ff.

[6] *Recherches sur les véritables Noms des Vases Grecs*, Paris, 1829.

[7] *Observations sur les Noms des Vases Grecs*, etc., Paris, 1833, and *Supplément*, 1837-38.

[8] *Rapporto Volcente* in *Ann. dell' Inst.* 1831, p. 221 ff.; and in criticism of Letronne, *Berlins ant. Bildwerke*, i. p. 342 ff., and *Ann. dell' Inst.* 1836, p. 147 ff.

introduced a more scientific method of criticism and classification, though his results cannot be considered as final. Other writers were Müller,[1] Thiersch,[2] Ussing,[3] Krause,[4] and Jahn,[5] of whom Ussing followed practically on Gerhard's lines but with more success; Krause, though exhaustive, is on the whole uncritical; and Jahn has treated the subject with his wonted conciseness and sobriety. Of late years little attention has been paid to it, principally, no doubt, for the reason that so many conventional names have been generally accepted for the ordinary shapes by archaeologists, who have recognised the fact that it will never be possible to treat the subject with scientific accuracy.[6]

The classification of the shapes of vases has usually been undertaken on the lines of distinguishing their main uses, such as (1) those in which food or liquids were preserved; (2) those in which liquids were mixed or cooked; (3) those by means of which liquids were poured out or food distributed; (4) drinking-cups; (5) other vases for the use of the table or toilet. Thus we have the pithos and amphora for storing wine, the krater for mixing it, the psykter for cooling it, the kyathos for ladling it out, and the oinochoë or prochoos for pouring it out; the hydria was used for fetching water from the well. Of smaller vases, the names for drinking-cups are innumerable, but the phiale, for instance, was employed chiefly for pouring libations; while dishes and plates are represented by the lekane, tryblion, pinax, and so on. The pyxis was used by women at their toilet, and the lekythos, alabastron, and askos for holding oil and unguents. There is an interesting passage in Athenaeus (iv. 142 D)[7] which gives a list of the vases required for use at a banquet: "And on the tripod was placed a bronze wine-cooler (ψυκτήρ) and a κάδος (bucket) and a silver

[1] *Handbuch d. Archäol.* § 298-301.

[2] *Ueber die hellenischen bemalten Vasen*, Munich, 1844.

[3] *De Nominibus Vasorum Graecorum*, Kopenhagen, 1844. This work is very useful for its exhaustive references to classical literature. It is also critically up to the mark.

[4] *Angeiologie*, Halle, 1854.

[5] *Vasensamml. zu München*, p. lxxxvi ff. (1854).

[6] There are some very useful articles in Daremberg and Saglio's *Dictionnaire* under the respective headings, so far as the work has appeared (down to M in 1904).

[7] Cf. also xi. 462 D.

σκαφίον holding two kotylae (one pint), and a ladle (κύαθος); and the wine-jug (ἐπίχυσις) was of bronze, but nobody was offered drink unless he asked for it; and one ladleful was given out before the meal."

For the purposes of this work it is hoped that the usual method of classification indicated above will be found sufficient, supplemented by the descriptions of Athenaeus and other writers, where any details can be obtained; but it is obvious that a really critical treatment of the subject should be chronological, with endeavours to trace the first appearance and development of each type. In the present state of our knowledge, however, it would seem impossible to do so with success.

We begin our description of the vases of the Greeks with an account of the large vases of rough manufacture calculated to hold great quantities of wine, water, or food. The chief vase of this class is the **Pithos** or cask (Lat. *dolium*), a vase of gigantic size, found both in Italy and Greece.[1] They are shaped like enormous barrels, with bulging bodies and wide mouths, and answer to the modern hogshead or pipe. When full, the casks were closed with a circular stone, or with a cover of clay. They were used to hold honey, wine, and figs, and were usually kept half-buried in the earth.[2] They were sufficiently capacious to hold a man, and the famous "tub" of Diogenes was of this form. On a lamp in the British Museum and other monuments[3] he is represented appearing from one, presumably on the occasion of his interview with Alexander. In the vase-paintings Eurystheus takes refuge in a pithos from Herakles when he brings the Erymanthian boar,[4] and the same shape of vase is represented as holding the wine of the Centaurs

[1] Pliny (*H.N.* iii. 82) states that the island of Pithecusa (the modern Ischia) was so called not from πίθηκος, an ape, but from πίθος (*a figulinis doliorum*), implying that wine-casks were made here in antiquity, as they are at the present day.

[2] Athen. xi. 465 A, and cf. 495 B; *Il.* xxiv. 527; see Ussing, p. 33, and Suidas, *s.v.* The comic poets also speak of a πιθάκνη, or small πίθος, used for holding wine at festivals.

[3] See Chapter XX., and a relief in the Villa Albani, Helbig, *Führer*², ii. p. 56, No. 853; cf. also Hesychius, ἐν πίθῳ, and Ar. *Eq.* 792.

[4] See Chapter XIV. (Fig. 126).

and the water drawn by the Danaids.[1] The "box" of Pandora was in reality a large jar of this kind, as we learn from Hesiod.[2] It required great skill to make these vases, whence a Greek proverb characterised an ambitious but inexperienced man as "one who began with a cask" (*ἐν πίθῳ τὴν κεραμείαν μανθάνειν*).[3] They were not made on the wheel but by a peculiar process, which is described as plastering the clay round a framework of wood, called *κάνναβος*[4]; it appears to have been made of vertical boards ranged in a circle, like a tub.

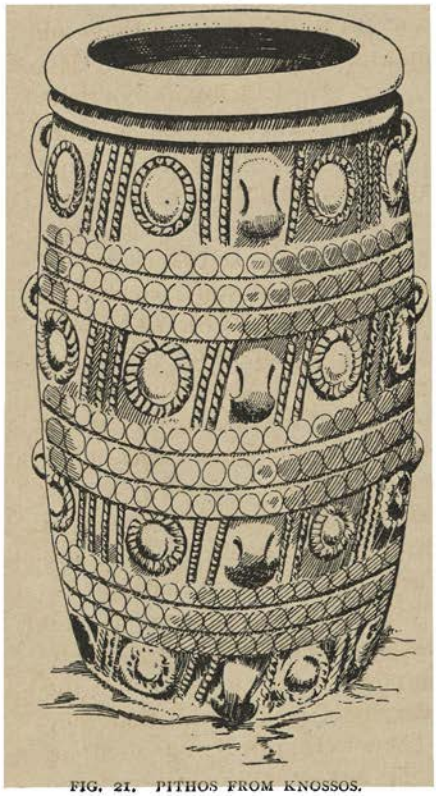


FIG. 21. PITHOS FROM KNOSSOS.

The British Museum possesses two or three *πίθοι* of exceptional size, ornamented with bands of geometrical patterns in relief, which were obtained from Mr. (now Sir A.) Biliotti's excavations at Ialysos in Rhodes, and belong to the Mycenaean period. In 1900 Mr. Arthur Evans, among the remains of the Minoan palace at Knossos in Crete, came upon a courtyard round which stood a number of similar *πίθοι*, with decorations of a Mycenaean character (see Fig. 21).[5] These may be considered to belong to the middle

[1] B.M. B 464, F 210.

[2] *Op. et Di.* 98; the word has been confused with *πυξίς*, meaning a box. See *J.H.S.* xx. p. 99.

[3] Hesych. *s.v.*; Pollux, vii. 163.

[4] This must be distinguished from *κάναβος* (see p. 111), a skeleton frame on which statues were modelled. See *Geoponica*, vi. 3, p. 4; Pollux, vii. 164; Jahn in *Ber. d. sächs. Gesellsch.* 1854, p. 42; Blümner, *Technologie*, ii. p. 42.

[5] *Brit. School Annual*, 1899-1900, p. 22; cf. *Amer. Journ. of Arch.* 1901, p. 404.

of the second millennium B.C., and it is therefore evident that the πίθος may claim an antiquity second to none among forms of Greek vases.

Among examples of later date may be mentioned the large series recently found in Thera by German explorers, some plain, others with painted geometrical decoration; they are partly of native make, partly importations from Crete, and date from the seventh century B.C.[1] Dr. Dörpfeld found examples of πίθοι in the remains of the earlier cities at Hissarlik, from the second to the seventh layers. These were used for keeping all sorts of liquids and solids, and also apparently formed part of the cooking apparatus.[2] Others were found in the excavations of Mr. J. Brunton on the site of Dardanus in the Troad; they were of pale red clay, with a stone cover. In excavating between Balaclava and Sevastopol Colonel Munroe discovered no less than sixteen, about 4 ft. 4 in. in height, within a circular building, apparently a storehouse; they were also of pale red ware. One had incised upon its lip ΔΔΓΓΙΙΙ, apparently indicating its price. Similar πίθοι have been found in Athens, some having fractures joined by leaden rivets. Large πίθοι with archaic reliefs have been found in Crete, Rhodes, Sicily, and Etruria (at Cervetri); they are imitated from metal vases, with designs of Oriental character.

Perhaps of all the ancient vases the best known is the **Amphora** (ἀμφορεύς or ἀμφιφορεύς), which was used for a variety of domestic and commercial purposes. So numerous are the vases of this form, found all over the Greek world, that they merit a lengthy description. They were principally used for wine, but also for corn, honey, oil, and other substances,[4] and to the use of the word as a measure of capacity we have already alluded. It should be borne in mind that the conventional use

[1] *Ath. Mitth.* 1903, pp. 96 ff., 140 ff., Beilagen 1-5.

[2] *Troja und Ilion*, i. p. 315.

[3] See Pottier, *Louvre Cat.* ii. p. 381 ff.; *Ath. Mitth.* 1886, pl. 4; *Röm. Mitth.* xii. (1897), p. 256; *Arch. Zeit.* 1881, p. 44 ff.; Kekulé, *Terracotten von Sicilien*, pls. 55-7, 60; and p. 496.

[4] Hom. *Il.* xxiii. 170; *Od.* ii. 290, ix. 164; *Inscr. Gr.* (*Atticae*), ii. 965 *b* (oil); and see Chap. XXI., *s.v.* See also Jahn, *Vasens. zu München*, p. xcii, and cf. the amphora in Rome with the oil-selling scene (Helbig, 70 = Reinach, i. p 106).

of the word *amphora* in speaking of the painted Greek vases implies a quite different form from the plain wine-amphorae, which were neither painted nor varnished; the type of vase is the same, but the painted examples are smaller and stouter, with a proper foot. For the present we confine our description to the unadorned amphora of commerce.

Besides the two handles from which the word derives its name,[1] the wine-amphora (Fig. 22) is distinguished by its long egg-shaped body, narrow cylindrical neck, and pointed base; this form is often known as *diota* (the Latin equivalent). The

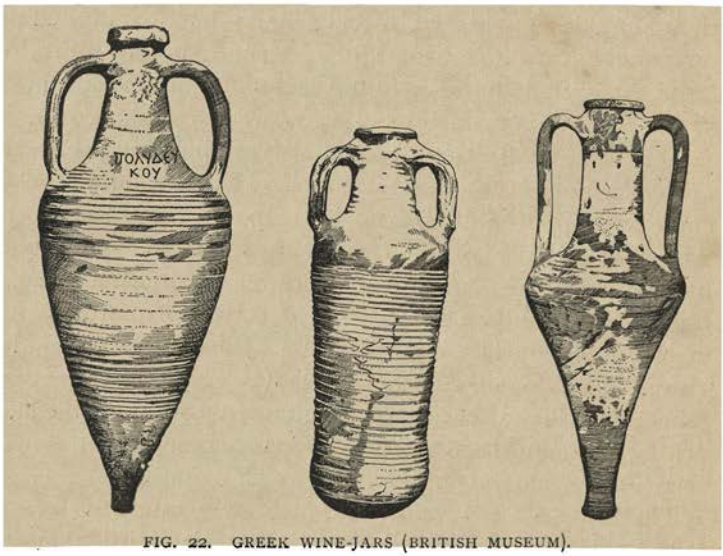


FIG. 22. GREEK WINE-JARS (BRITISH MUSEUM).

base is sometimes supplied with a ring to stand on, but is more usually pointed, in order to be easily fixed in the earth in cellars. The mouth was sealed by means of a conical cover terminating in a boss.

Remains of these amphorae have been discovered not only in Greece itself, but also wherever the Greek commerce and settlements extended, as in Alexandria, Kertch (Panticapaeum), Corfu, Rhodes, Sicily, and Asia Minor. They appear to have

[1] *ἀμφιφορεύς*, from *ἀμφί*, "on either side," and *φέρω*, "I carry." Athenaeus (xi. 501 A) explains it as *ὁ ἑκατέρωθεν κατὰ τὰ ὦτα δυνάμενος φέρεσθαι.*

been used at a very early period, plain specimens of red ware being found not only in the early Greek tombs, like that of Menekrates in Corfu (p. 54), but even in tombs of the Bronze Age period, as in Cyprus. The typical long shape, however, did not come into fashion until about 300 B.C., when the island of Rhodes was a great trading centre, carrying on an active commerce all over the Mediterranean. Amphorae of this form are represented on the coins of Chios and Thasos with reference to their trade in wine, and on the Athenian silver tetradrachms which belong to the period subsequent to about 220 B.C.; they are shown on the reverse, lying horizontally, with an owl above. In this case the reference may be either to the large Attic trade in oil or to the use of the amphora for voting at the election of magistrates (see p. 167).

The most interesting feature of the wine-amphorae is the device or impression stamped on the handles either in a circular medallion or an oblong depression. This was done by means of a stone or bronze stamp, while the clay was still moist. They are found in all parts of the ancient world, but the greater number can be traced to a few places of origin, of which the most important are: Rhodes, Knidos, Thasos, Paros, and Olbia in Southern Russia. As regards the stamps, the usage differs at each centre; but apart from them the handles can be distinguished by their shapes and material, as will be seen in the subsequent description.

The Rhodian amphorae, of which large numbers have been found at Alexandria as well as in the island itself, were of a very pure and tenacious clay, with a fracture as sharp as that of delf. The colour is pale, deepening to a salmon hue. The numerous separate handles which have also been found have all belonged to the same form of amphora, with long square-shouldered handles, as on the Athenian and Chian coins. An entire vase, but without a stamp,[1] which was brought from Rhodes, was 40 in. in height, and the height of the handles alone was 10 in., the upper part attached to the top of the mouth being 3 in. long. This is a typical instance for the shape. The seal when found is impressed on the upper part of the

[1] *Trans. Roy. Soc. Lit.* 2nd Ser. iii. (1850), p. 7.

handle, the size of the label being generally about $1\frac{1}{2}$ in. or $1\frac{3}{4}$ in. long, by $\frac{5}{8}$ in. wide, except when they are oval or circular. At Alexandria eight distinct varieties of handles were found, broken from amphorae of different countries, but only one inscribed; the base also assumed various forms.

In the Rhodian amphorae two stamps are in use, a principal and an accessory one (Fig. 23*a*).[1] The former has a device of the head of Helios, the Sun-God, or the emblematic rose, both of which types occur on the coins; it is accompanied by an inscription, in the form *ἐπὶ τοῦ δεῖνος*, sometimes explicitly described as *ἱερέως*, *i.e.* in the year of the eponymous priest of the Sun. This is followed by the name of a Rhodian month. The accessory stamp contains the name of a person, usually

From *Dumont*.

FIG. 23. AMPHORA-STAMPS FROM RHODES.

in the genitive. The months belong to the Doric calendar, and are as follows: Thesmophorios, Theudaisios, Pedageitnyos, Diosthyos, Badromios, Sminthios, Artamitios, Agrianios, Hyakinthios, Panamos, Dalios, Karneios, and the second Panamos, an intercalary month.[2] The object of the stamps is involved in obscurity, but they were probably intended to certify that the amphora (which was also a measure) held the proper quantity. It is clear that they could not have been intended to attest the age of the wine, as the vessel might be used for any sort, and the stamps bear the name of every month in the year.

Other handles of Rhodian amphorae, stamped with an oblong

[1] Dumont, *Inscrs. Céramiques*, pl. 9.

[2] The order here given is that suggested by H. von Gaertringen in *Inscr. Gr.* xii. pt. 1, p. 8.

cartouche or label, may be divided into two classes: (1) Those inscribed with the name of a magistrate and an emblem. The latter resembled the "adjuncts" found on the coins of some Greek cities, but it is uncertain whether they were selected on any fixed principle, or merely adopted from caprice. They may perhaps allude to the deity whom the magistrate particularly honoured as the patron god of his tribe or village. The same symbol was, however, often used by many individuals, and on the whole the number known is not large. (2) Those bearing the name of a magistrate, accompanied by that of a month of the Doric calendar, but without any emblem (Fig. 23*b*).

Many handles of amphorae from Knidos have been found on different sites. Their clay is coarser than the Rhodian, its colour darker and duller, and the amphorae differ also somewhat in form, nor are they of so early a date, being mostly as late as the Roman Empire. The stamps on the Cnidian amphorae, like those of Rhodes, are inscribed with the name of the eponymous magistrate, and also with that of the wine-grower or exporter of the produce, which is always marked as Cnidian. The stamps show a great variety in the matter of emblems. Remains of Cnidian amphorae have been found in Sicily, at Athens, Alexandria, and Olbia. The palaeography of the inscriptions covers a period of two centuries, from Augustus to Marcus Aurelius, or even later.

Numerous examples have been found of handles of amphorae, in which the celebrated wine of Thasos was exported to places such as Thasos and Olbia. The stamps are nearly square, with a device in the middle, the inscription ΘΑΣΙΩΝ, and the name of an official. The names are usually in the nominative, but in one instance at least the genitive is used. The symbols include an amphora, kneeling archer, cornucopia, dolphin, etc. (Fig. 24).[1] The known stamps of Paros are few in number; they are simply inscribed ΠΑΡΙΩΝ, which in one instance is written retrograde.[2]

[1] Dumont, *Inscrs. Céramiques*, pl. 6; see also *Revue Archéol.* N.S. iii. (1861), pls. 9, 10, p. 283.

[2] *Jahrbücher für Philol.* Suppl. xvii. (1890), p. 281.

Handles inscribed with the name of an aedile (*ἀστυνόμος*) and of another person, probably a magistrate, have been found on various sites in the Crimea and Southern Russia, principally at Olbia. At Panticapaeum (Kertch) two amphorae were found with stamps across the neck, thus: ΕΥΑΡΧΟ ΕΠΙ ΚΑΛΛΙΑ / ΑΡΙΣΤΟΝ ΕΟΠΑΜΟΝΟΣ the upper name being that of the magistrate.[1] These vases appear to have been made on the spot.

From *Dumont.*

FIG. 24. AMPHORA-STAMPS FROM THASOS.

Stoddart also mentions amphora-handles as having come from Corinth,[2] with names which can be traced to the time of the Roman dominion. Falkner found at Pompeii an amphora with a Greek inscription of three lines painted in red and black, with the name of Menodotos and the letters KOR. OPT., which *may* mean "the best Corcyraean brand." A bibliography of the subject is appended below.[4]

[1] Boeckh, *C.I.G.* ii. 2121.

[2] *Trans. Roy. Soc. Lit.* iii. (1850), p. 84.

[3] *C.I.L.* iv. 2584; other examples from Pompeii are given in Chapter XXI.

[4] Stoddart in *Trans. Roy. Soc. Lit.*

Among painted vases the amphora holds a high place, especially in the black-figure period, during which it was most prominent. It is distinguished from the plain type, as already pointed out, by the proportions of the body, as well as by the graceful curve of the handles and the flat circular foot. The variations in its form at different places and periods are so marked that they have led to the adoption of qualifying adjectives for each kind. Although these names cannot now be accepted in a strict sense, they are sometimes useful as conventional expressions. We proceed to describe these in detail.

(1) The origin of the Greek amphora is clearly to be sought in the pithos of primitive times, as may be seen in the vases of the Melian and Proto-Attic classes, and in the early vases with reliefs from Bocotia, Crete, Thera, and elsewhere. It is not found in the Mycenaean style, the large vases of which come under the heading of the krater (see below); and its appearance in Greece dates from the developed stage of the Geometrical period. The earliest specimens among the painted vases are virtually small pithoi, characterised by a long cylindrical neck, and large elaborate handles obviously imitating metal (see p. 495). Of this type are several of the Boeotian Geometrical and Proto-Attic vases discussed in Chapter VII.,[1] and the Boeotian vases with reliefs.[2] Among the Proto-Attic vases found at Vourva a development occurs, in which the neck is greatly elongated, and the body becomes exceedingly slim, while the handles are simplified into plain flat bands united to the neck by bars of clay (see Fig. 89, p. 299). This form is found still further developed in the prothesis-amphorae of the B.F.

2nd Ser. iii. (1850), p. 1ff., iv. (1853), p. 1 ff.; Boeckh, *C.I.G.* iii. Nos. 5375-5392, 5555-5566, 5751 (Sicily); *Philologus*, 1851, p. 278 ff. (Sicily); *Jahrb. für Philol.* Suppl.-Bd. xviii. p. 520 ff.; *Abh. d. phil.-phil. Kl. d. k. bayer. Akad. d. Wiss.* ii. (1837), p. 781 ff.; *Mélanges Gréco-Romaines*, i. p. 416 ff. (Olbia); Dumont, *Inscrs. Céramiques de Grèce*, Paris, 1872; *Ath. Mitth.* 1896, p. 127 ff.; *Jahrb. für Philol.* Suppl.-Bd. iv. p. 453, v. p. 447, x. pp. 1, 207 (Olbia); *Inscr. Gr.* (*Ins. Maris Aegaei*), xii. pp. 175-203, Nos. 1065-1441 (amphora-handles from Rhodes); and other references already given.

[1] *E.g.* Athens 657.

[2] *Bull. de Corr. Hell.* 1898, pls. 4, 6; Plate XLVII.

period[1]; but these are comparatively rare, and the more normal evolution of the amphora with cylindrical neck is to be traced in the varieties (2) and (6) described below.

(2) The early amphorae preceding the ordinary B.F. Athenian types were divided by Gerhard into two classes, "Egyptian" and "Tyrrhenian."[2] He describes the former as a vase with tolerably pronounced curve of body, entirely covered with horizontal bands of figures; the latter as of similar form, but with decoration confined to a panel on either side. As regards shape, therefore, the two are actually one, and may be regarded as such for our present purpose; but it is curious to note that the particular class called "Egyptian" by Gerhard has since his time been generally known as "Tyrrhenian," while his "Tyrrhenian" class has now received, from the peculiar mannerisms of the paintings, the name of "affected" vases.[3] At all events the word is convenient to adhere to for the description of this particular shape (Fig. 25), with its long, egg-shaped body, the vertical section of which is almost an ellipse, a shape common to all early B.F. fabrics—Athenian, Rhodian, Ionic, and Corinthian—but best illustrated by the "Corintho-Attic" class described by Thiersch.[4] It is seldom found in purely Attic examples, and disappears after the middle of the sixth century.

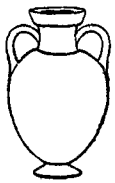


FIG. 25. "TYRRHENIAN" AMPHORA.

(3) Gerhard's next class is that of the Panathenaic amphorae, which have a long body shaped something like a top, and tapering sharply downwards; the mouth, handles, and neck are small, as is also the foot (Fig. 26). It is so called as being the characteristic form of the earlier (sixth-century) Panathenaic prize-vases, but is also occasionally found

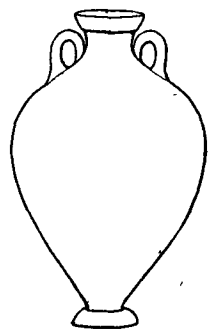


FIG. 26. PANATHENAIC AMPHORA.

[1] *E.g.* Baumeister, iii. p. 1975, fig. 2114; Athens 688, 690.

[2] *Berlins ant. Bildw.* p. 346; see also Thiersch, *Tyrrhen. Amphoren*, p. 1 ff.

[3] See below, p. 388, and Karo in *J.H.S.* xix. p. 147 ff.

[4] See note 2 above; also p. 324.

in the ordinary fabrics. This type, together with the two following examples, not mentioned explicitly by Gerhard or the other early writers, form the class of "black-bodied" amphorae, as they may conveniently be termed, in order to distinguish those with panel-decoration from those in which the body is entirely covered with red glaze (see below).

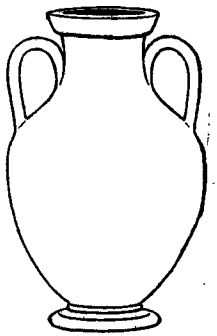


FIG. 27. PANEL-AMPHORA.

(4) The second variety of "black-bodied" amphora (Fig. 27) is closely akin to the Panathenaic, but the body is better proportioned. It is characterised by the wide mouth in the form of a thick ring, the cylindrical handles, and the concave curve of the shoulder. From the style of the paintings it is probable that this variety must be placed early in the black-figure period.

(5) This type, on the other hand, is later in the period, being developed out of the last, from which it is marked off only by the form of the handles, which are broad and flanged, and often decorated with patterns. These vases are mostly of large size, and are transitional, some R.F. varieties being known. The paintings on them are in the style of Exekias, Andokides, and Euthymides (see for an example Plates XXXI., XXXII).

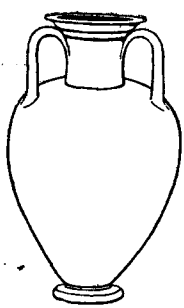


FIG. 28. RED-BODIED AMPHORA.

(6) The shape of the "red-bodied" amphora (Fig. 28) is peculiar to the black-figure period.[1] Its characteristic features are the straight, cylindrical neck, with its chain of lotos-and-honeysuckle, the width of the shoulder, and the ribbed handles, formed from moulds in two or three parallel pieces. Artistically it is far superior to the black-bodied, and includes some of the finest specimens of B.F. painting (as in the vases of Exekias), while the decorative element reaches the perfection of beauty and symmetry.

[1] A "transitional" example has recently been published by Hartwig in *Röm. Mitth.* 1901, pl. 5, p. 117

(7) The red-bodied amphora seems to have been the prototype of what is the most characteristic form of the red-figure period—the so-called "Nolan" amphora (Fig. 29).[1] These have been largely, but not exclusively, found at Nola, whither they seem to have been imported in large numbers from Greece. The whole vase is covered with black, and the decoration confined to one or two figures each side, while the elegant and beautiful outline, the lustre of the varnish, and the restraint of the designs combine to render these perhaps the most beautiful products of Athenian ceramic art. The handles are sometimes four-sided, more often ribbed, and sometimes formed of two twisted strands, produced by rolling up the soft paste; the general outline is that of the last class, but the proportions are far more slender and graceful.

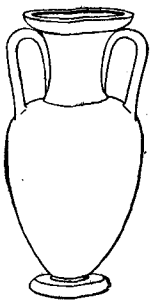


FIG. 29. "NOLAN" AMPHORA.

(8) The Apulian amphora (Fig. 30) illustrates the form which, though generally adopted in Apulia, may have had its origin at Athens, as it is adopted for the fourth-century Panathenaic amphorae.[2] It is distinguished by its great size and egg-shaped body; the mouth is thick and high, spreading out like an inverted cone, and the neck is not cylindrical, but merges into the shoulder. A variety of the Apulian amphora, hardly common enough to form a separate class, was formerly known as the "candelabrum-amphora," from its resemblance to an incense-burner (an object wrongly interpreted formerly as a *candelabrum*, or lamp-stand). Its peculiarities are the cylindrical body, tall neck, and elaborate handles in the form of double scrolls.[3]

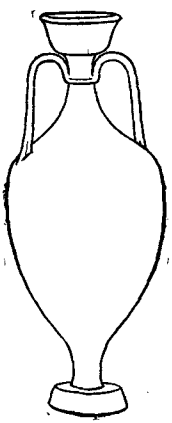


FIG. 30. APULIAN AMPHORA.

(9) The Campanian amphora is derived directly from the

[1] See also Plate XXXV.

[2] Cf. B 603-609 with F 331, 332 in the Fourth Vase Room of the Brit. Mus. But it appears in Southern Italy at an earlier period than the fourth century; see Patroni, *Ceram. Antica*, p. 138, and below, p. 485.

[3] See for examples F 339, 340 in Brit. Mus., and Patroni, *Ceramica Antica*, p. 142.

"Nolan," and is in fact a local adaptation, but it was chiefly manufactured at Cumae.[1] It generally has twisted handles, and is painted in polychrome; the proportions are somewhat more elongated than those of the "Nolan" class.

(10) A rare variety of the amphora is sometimes found in the red-figure period, with large spheroidal body and pointed base, intended to be placed in a separate stand. The conventional name of *diota* is sometimes given to this form, from its imitation of the pointed base of the wine-amphora.[2]

(11) The last variety of the amphora which calls for consideration is the wide-bellied type, usually called (on very slight authority) a *pelike*, πελίκη (Fig. 31).[3] The name was invented by Gerhard, and has been generally adopted since, but is only to be regarded as a conventional term. This form, which swells out towards the base, and has no stem or neck, is very rarely found before the fifth century,[4] but is common in the R.F. period, and in the Apulian style, in which its proportions are usually more slender.

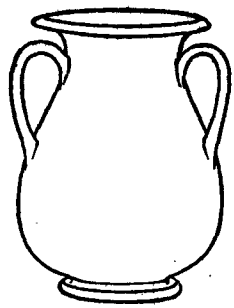


FIG. 31. SO-CALLED "PELIKE."

The amphora when complete usually had a cover of clay, either coated with a plain black varnish or decorated with bands and patterns; it was lifted by means of a central knob. An amphora in the Berlin Museum (*Cat.* 1860) has a double cover, the inner one being of alabaster.

Of the other names which seem to denote vases adapted for containing and storing wine or other commodities, the most important is the **Stamnos** (στάμνος), used for holding wine and oil. It is mentioned by Pollux[5] in his list of wine-jars, and he quotes a line from Aristophanes about "a stamnos of

[1] See Patroni, *Ceramica Antica*, p. 79.

[2] Instances in B.M., E 350, and Brussels Museum (Noel des Vergers, *Étrurie*, pls. 32-36); also a plain wine-amphora of this form, dredged up from the sea, in the Terracotta Room, British Museum, Case 51.

[3] See Pollux, x. 78; Athen. xi. 495 A. The former gives πέλικα as an Aeolic synonym of λεκάνη.

[4] B.F. "pelikae" in B.M., B 190-192.

[5] x. 72. Cf. also Plat. Com. *apud* Athen. xi. 783 D.

Chian wine arriving." The diminutives *σταμνίον* and *σταμνάριον* are also found, and Aristophanes speaks of a "small Thasian stamnos of wine."[1] The amphora is defined in the *Etymologicum Magnum* as "a two-eared *σταμνίον*." It has been generally identified with a form well known in the R.F. period, but only found in that style: a spherical jar with short thick neck and small side-handles, of which some very beautiful specimens exist (Fig. 32). The word is still in use in modern Greek.

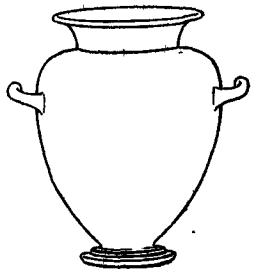


FIG. 32. STAMNOS.

The *βῖκος* is described by Hesychios as a *στάμνος* with ears, and by Eustathius as a vessel holding wine[2]; it was also used for figs and salted food.[3] It is probably only another name for the *στάμνος*, but it seems to be inaccurately described by Athenaeus[4] as "a saucer-shaped drinking-cup" (*φιαλῶδες ποτήριον*). It was apparently identical with the *ὕρχη*,[5] a word used by Aristophanes,[6] but more commonly by Roman writers in its Latin form *orca*.

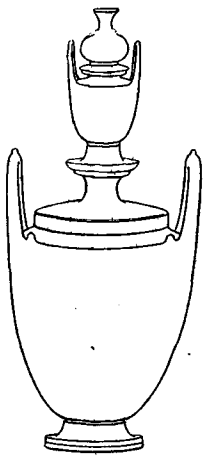


FIG. 33. SO-CALLED "LEKANE."

The names of Apulian stamnos or *λεκάνη* have at different times been given to a late form of painted vase found in Southern Italy, with high or low stem, upright handles, and cover, which latter often takes an elaborate form, being surmounted by one or more small vases, also with handles (Fig. 33). The word *λεκάνη*,[7] however, seems to indicate a large bowl rather than a covered jar, and no satisfactory name has as yet been found. A similar but flatter

[1] *Lys.* 196. See also Demosth. *Lacr.* 933, where eighty stamni of sour wine are mentioned.

[2] *Οἰνοδόχον ἀγγεῖον, ad Il.* xviii. 1163, 23. Cf. also Herodotos, i. 194; Xen. *Anab.* i. 9, 25.

[3] Lucian, *Meretr. dial.* 14; Athen. iii. 116 F.

[4] xi. 784 D.

[5] Pollux, vi. 14.

[6] *Vesp.* 676, and Schol. *ad loc.*

[7] See below for an account of this word (p. 176).

form of vase, like a covered bowl or dish, has been named λεκάνη, λεπαστή, or covered pyxis, but no name is satisfactory.

The λάγυνος or λαγυνίς seems to have been a narrow-necked jar of considerable size. Athenaeus[1] says the word represented a Greek measure, equivalent to twelve Attic κοτύλαι, or six pints, and that it was in use at Patrae. The word is used by Plutarch for the jar in which the stork offered entertainment to the fox[2]; it frequently appears in the Latin form *lagena* (see Chapter XXI.). A wicker-covered λάγυνος was known as a πυτίνη.[3]

Another form of the same class is the κάδος, with its diminutive καδίσκος, which is represented by the Latin *situla*, or bucket, the latter word being the one usually employed by archaeologists. It is a form easily to be recognised in Greek art, but is more usually found in metal-work, *e.g.* in Etruscan and Italian bronzes, than in pottery.[4] The painted situlae, of which a few late examples from Italian tombs exist, are obviously direct imitations of the metal buckets, and in some cases actually have movable bronze handles attached. The situla appears to have been used not only for keeping wine in the cellar, but for serving it up at banquets[5]; the word is also used by Aristophanes for a voting-urn and a well-bucket.[6] In Latin the uses were probably distinguished, *cadus* denoting a wine-jar, *situla* a water-bucket. Athenaeus obviously goes astray in regarding it as a drinking-cup.

A vase which was used almost exclusively for carrying water was the **Hydria,** as is implied by its name (ὑδρία, from ὕδωρ). Its most essential characteristic is the possession of three handles, a large one at the back for carrying when empty, and two small horizontal handles at the sides for carrying when full. The shape of the body varies at different periods; in the B.F. period the shoulder is flat and marked off by a sharp

[1] xi. 499 B, *q.v.* for several quotations illustrative of this word; also *Anth. P.* vi. 248 (στειναύχην).

[2] *Quaest. Conviv.* i. 1, 5, p. 614 E (λαγυνίς): cf. Phaedr. i. 26, 8.

[3] Hesych. *s.v.* βυτίον.

[4] See for a fine instance, *Brit. Mus. Cat. of Bronzes*, 650.

[5] Cf. Hdt. iii. 20; Athen. xi. 483 D; Hor. *Od.* iv. 11, 2; 12, 17.

[6] *Av.* 1032; *Eccl.* 1002.

angle from the body (Fig. 34); but about the beginning of the fifth century this is replaced by a form with more rounded outline and smaller handle at the back, generally known for the sake of distinction as a *kalpis* (Fig. 35). In the earlier variety (of which some R.F. examples are known) there are always two subjects, one forming a frieze on the shoulder, the other treated more in the manner of a metope on the body; they are invariably enclosed in frames or panels, as on the "black-bodied" amphorae. Sometimes a third subject in the form of a frieze of animals is added below. In the earlier stages of the B.F. period this form is seldom found, except in a class known as the "Caeretan hydriae," distinguished (as far as concerns their shape) by their round, plump body, as also by the florid character of their ornament and curious treatment of subjects (p. 353). These vases were closely copied by the Etruscans. The *kalpis* form sometimes occurs with black figures, but only in small late specimens, chiefly found in Rhodes. In the vases of Southern Italy the *kalpis* is fairly popular, but the body is more cylindrical and the foot higher.

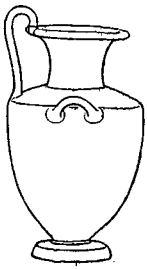


FIG. 34. HYDRIA.

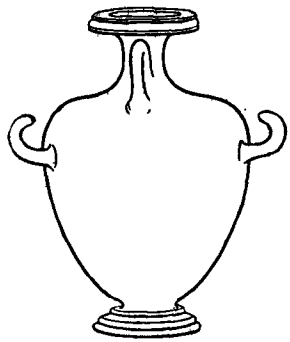


FIG. 35. KALPIS.

Any doubt that might have existed as to the identification of the *ὑδρία* is solved by the appearance of the word inscribed over the pitcher which Polyxena dropped in her flight from Achilles, on the François vase. In a scene very common on B.F. hydriae, which represents women drawing water at a fountain, this form of vase is invariably depicted. The word seldom occurs in Greek literature, but Kallimachos speaks of *καλπίδες* placed on the roof of the Parthenon (?) at Athens, not, he says, by way of ornament, but as prizes of wrestlers.[1] Hence the idea was conceived by Panofka that Panathenaic prize-vases were of this form.

[1] Ussing, p. 45. Cf. Pind. *Ol.* vi. 68; also Schol. *in Nem.* x. 64.

Pollux (x. 74) thinks that the hydria was also a wine-vase, and suggests its identity with the πλημοχόη, a vase with broad base used in the Mysteries; but Athenaeus[1] implies that this was used for pouring, and it must therefore have been some kind of jug. The κάλπις is actually identified with the ὑδρία by Aristophanes, as may be seen by a comparison of two lines in the *Lysistrata*.[2] From a passage in Isocrates[3] it would appear that the hydria was used as a voting-urn or ballot-box, but the κάδος was more generally used for this purpose. That the amphora was also so used we know from Athenian coins.

The next class to be considered is that of vases employed for mixing wine and water for drinking, for which the generic name is that of κρατήρ (from κεράννυμι, "I mix"). Before discussing this form, however, allusion must be made to a vessel which is variously described as a *hydria* or a *krater*, and is therefore a link between the two varieties; it was at any rate pre-eminently a water-jar, and was known as a κρωσσός (connected with Fr. *cruche* = Eng. "crock"). We have no indications of its form except that it had two handles[4]; Pollux (viii. 66) ranks it with the ὑδρία and κάλπις as a water-vessel.[5] It was also used for holding ashes,[6] and Plutarch enumerates it among the vessels in the bath of Darius.[7] Of the same character was perhaps the ἀρδάνιον or ἀρδάλιον, described as a water-pot.[8] Athenaeus also mentions a πρόαρον, or wooden vessel of the krater type, as used in Attica.[9]

The **Krater** is distinguished from the amphora by its larger body, wider mouth, and smaller handles. It was often placed on a stand, called ὑποκρατήριον, or ὑποκρατηρίδιον,[10] which was either of pottery or metal such as bronze. This either took the form of a hollow cylindrical base, painted with subjects, or of an elaborately moulded stem with egg-and-tongue and other

[1] xi. 496 A. See *Boston Mus. Report*, 1899, p. 73.

[2] Cf. 327 with 539. See for other mentions of the word, Ussing, p. 44.

[3] *Trapezitae*, 33; cf. Lucian, *Hermot.* 40, 57 (κάλπις), and Chap. XXI.

[4] Soph. *O.C.* 473, λαβὰς ἀμφιστόμους. He is here speaking of a κρατήρ, but in l. 478 he calls the same vase a κρωσσός.

[5] Cf. also Aesch. *Fr.* 91, and Eur. *Cycl.* 89; *Ion*, 1173; Theocr. xiii. 46.

[6] Mosch. iv. 34; *Anth. P.* vii. 710.

[7] *Alex.* 20.

[8] Hesych. *s.v.*; Pollux, viii. 66.

[9] xi. 495 A.

[10] Cf. Hdt. i. 25 and the Sigean inscription (Roberts, *Gk. Epigraphy*, i. p. 78).

patterns.[1] It is constantly mentioned in Homer, but the kraters standing in the halls of the great palaces, as in that of Odysseus, were made of gold or silver. It is on the average the largest of all Greek vases (except the pithos), some of the later Apulian specimens (of which F 278 in the B.M. is one) reaching a height of about four feet; the ordinary examples have a capacity of three or four gallons. The names Argolic, Lesbian, Laconian, Corinthian, and Thericleian are applied to it by various ancient authors.[2]

In the different fabrics of Greek pottery it takes several distinct forms, to which convenient descriptive names have been given by Italian dealers, and some attempt has been made to identify names given by classical authors as forms of the krater, but without any success. The Italian names, however, which will be mentioned in due course, are somewhat cumbersome for English use.

Among Mycenaean vases there is a variety almost confined to Cyprus, to which the name of krater may fairly be given.[3] Its chief characteristics are a wide spheroidal body, hardly contracted at the neck (which in some varieties is non-existent), flat vertical side-handles, and a high stem. We hardly meet with this form again until the end of the Corinthian style, when it suddenly leaps into popularity.[4] The form in which it appears recalls, though it can hardly be imitated from, the Mycenaean krater, but the stem disappears, and the body is in section about two-thirds of a circle.[5] It is clearly a local invention, and on the evidence of finds at Syracuse, its first appearance may be traced to the first half of the seventh century. Its distinguishing feature, however, is in the handles, each of which is composed of two short vertical bars, sometimes meeting in an arch, supporting a flat square piece formed by a projection from the flat

[1] Examples of such painted stands in the B.M. are A 383-85, 464 (Geometrical); A 1349; B 167 (does not belong to the amphora below which it is placed). A 741 is unpainted; F 279 is placed on an ornamental open stand of bronze.

[2] See Hdt. iv. 61, 152; Athen. xi. 472 A and v. 198 D, 199 B, 199 E.

[3] See p. 246 and Plate XII.

[4] The Aristonoös krater (see p. 297) is almost of the Mycenaean form, and represents the transition to the Corinthian. Cf. also *Notizie degli Scavi*, 1895, p. 185, for one found at Syracuse.

[5] For specimens found at Corinth, see *Amer. Journ. of Arch.* 1898, p. 196; the form is also depicted on the Corinthian pinakes (*Ant. Denkm.* i. pl. 8, Nos. 12, 18).

broad rim, which is generally decorated. From the columnar appearance of these handles, the type has received the name of *vaso a colonnette*, which at all events is a more accurate description than the name κελέβη which, first proposed by Gerhard, has been generally employed by archaeologists, on what grounds it is not clear. This word, as described by Athenaeus, is clearly intended to imply a *drinking-cup* of some kind[1]; he quotes from Anakreon (*frag.* 63, Bergk), who speaks of drinking its contents at one draught (ἄμυστιν). On the other hand he quotes the authority of Pamphilos for identifying it with the θερμοπότις, or "water-heater," a kind of kettle. The probability is that it was a general and loosely-employed word.

FIG. 36. KRATER WITH COLUMN-HANDLES.

The column-handled krater is also found in the Naukratis wares of the sixth century, as well as in the imitations of Corinthian fabrics in which the Campana collection of the Louvre is so rich; the clay, style, and inscriptions of the latter clearly show their Corinthian origin, apart from the form. This krater is often decorated with friezes of figures (as in the famous Amphiaraos krater, p. 319). In the few existing Attic examples with black figures the subjects are in framed panels. This form, after dying out before the end of the sixth century, is revived towards the middle of the fifth in the later R.F. fabrics, but in a much altered form, which gives greater prominence to the columnar character of the handles. The neck is higher and narrower, and the handles consequently lengthened, the square tops being much diminished, and the body also takes a narrower and straighter form. In the fabrics of Southern Italy this development is even more strongly marked, and the elongated neck is adorned with an ivy-wreath in a panel; this type enjoyed some popularity both in Apulia and Lucania. The system of panel-decoration is employed throughout in all these cases.

[1] xi. 475 D. But Couve, in his valuable article in Daremberg and Saglio's *Dictionnaire* (*s.v.* Kelebe), is equally confident that the passage implies a kind of krater.

The only other form of krater found in the B.F. period—and that but rarely—is that known as *volute-handled* (*a rotelle*), from the large handles reaching above the lip and curved round in a scroll (Fig. 37). It has an egg-shaped body and large neck. The best and earliest example is the François vase (p. 370), from which it may be clearly seen that the form is derived from the columnar-handled krater. The British Museum also possesses a fine example signed by Nikosthenes, with a design in a frieze on the neck (B 364). The same shape and method of decoration appear in some fine examples of the severe R.F. style (cf. B.M. E 468, 469). During the R.F. period, two entirely new forms of krater suddenly appear, known respectively as the *vaso a calice* and the *vaso a campana*, or "calyx-krater" and "bell-krater"; the former is first used by Euphronios.[1] These names give a very

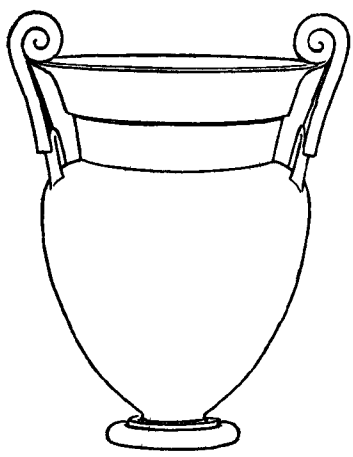


FIG. 37. VOLUTE-HANDLED KRATER.

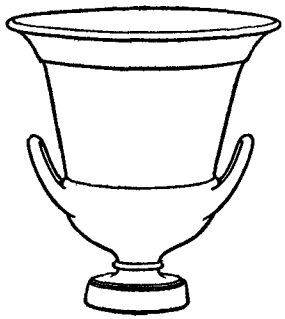


FIG. 38. CALYX-KRATER.

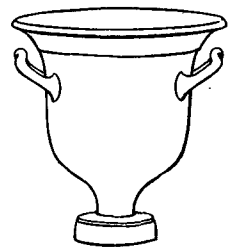


FIG. 39. BELL-KRATER.

accurate description of the forms, the one being like the opening calyx of a flower, the other like an inverted bell (Figs. 38, 39). In each the lip projects above the body, the neck having

[1] The Antaios krater in the Louvre, G 103.

entirely disappeared, while the handles of the calyx-krater drop to the lower part of the vase, and those of the bell-krater are attached horizontally to the sides. Both types of handle are evidently adapted to carrying full vessels, like the side-handles of the hydria. The name of *ὀξύβαφον* was given by Gerhard [1] to the bell-krater, again without any real authority, and probably owing to an error, from finding the name scratched underneath one example. Comparison, however, with similar inscriptions (see Chapter XVII.) shows clearly that the *ὀξύβαφον* was a small measure, less even than a *κύαθος*, or ladleful. Athenaeus (xi. 494 B) is very explicit on this point. He derives the name from *ὀξός*, vinegar, which liquid the vessel was used to contain, and describes it as *εἶδος κύλικος μικρᾶς*. It was therefore a small cup of some kind (see p. 194).

In Southern Italy the krater holds the same position as the amphora of the B.F. period.[2] The calyx- and bell-kraters are the two forms chiefly affected in the transition period when Athenian artists were working in Italy, or Italian artists directly under the influence of Athenian (see p. 465), but they are also found among the purely local fabrics, especially those of Cumae and Paestum (*ibid.*). The calyx-krater seems to have been reserved for the better and more carefully-executed specimens,[3] and the Italian bell-kraters often have a top-heavy effect from the greater height of their stems.

In Apulia (and occasionally also in Lucania—the Campanian potters did not affect large vases) the volute-handled krater once more appears, in great magnificence. Not only is the total size and bulk increased, but the neck is lengthened and the handles are often treated with great elaboration of detail, ending below in swans' necks spreading over the vase. In Apulia the volutes are generally replaced by medallions (whence the Italian name *vaso con maniche a mascheroni*) decorated with Gorgons' heads or figures, in relief, painted white, yellow, and red. These vases are sometimes, but incorrectly, called amphorae; they range from two to three or four feet in height. They are generally painted from head to foot with

[1] See *Berlins Ant. Bildw.* p. 358, No. 18.

[2] Cf. *B.M. Cat. of Vases*, iv. p. 6.

[3] Cf. F 37, 269-73 in B.M.

subjects, often of a sepulchral nature, and were no doubt largely made for use at funeral ceremonies. They are more fully described in Chapter XI.

The last variety of krater (Fig. 40) is formed by a peculiar type of vase, apparently devised by the Iapygian aborigines of Southern Italy,[1] which has a wide mouth and sloping shoulder, and sometimes a high neck. Its peculiarity is that it has four handles, two upright and two horizontal, to the sides of which large discs are attached, whence its Italian name is *vaso con maniche a rotelle*, from the wheel or rosette patterns painted on the discs. This feature caused Panofka to give it the name of *νεστορίς*, with reference to the famous four-handled cup of Nestor (*Il.* xi. 632). It need hardly be pointed out that there can be little in common between this form and the drinking-cup used by the Homeric hero, in spite of the fact that the latter was too heavy for an ordinary man to lift. We need not suppose that Nestor's cup (concerning which see below, p. 181) was larger than an ordinary "loving-cup," and the poet was probably guilty of a pardonable exaggeration. As a painted vase, this four-handled krater is peculiar to Lucania, and it is interesting to note that it sometimes appears depicted on Lucanian vases as used in daily life.[2]

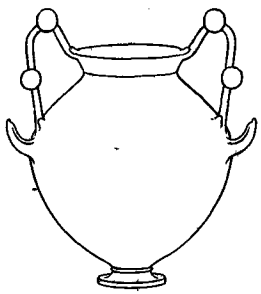


FIG. 40. LUCANIAN KRATER.

Closely related to the krater is the *ψυκτήρ* or *ψυγεύς*, a wine-cooler (from *ψύχω*, "cool"), which was used for cooling wine by means of snow or cold water.[3] The extant specimens are but few in number and vary in form. The British Museum possesses a very remarkable specimen in the form of a B.F. panel amphora (B 148),[4] with double walls and bottom, and a large spout on one side, through which the snow or cold water was introduced into the outer space; it was afterwards

[1] See Chap. XVIII.; Patroni, *Ceramica Antica*, p. 25; *Röm. Mitth.* 1897, p. 201 ff.

[2] *E.g.* Fig. 108, p. 482.

[3] Cf. Plat. *Symp.* 214 A, where it is described as holding more than eight kotylae.

[4] *J.H.S.* xix. pl. 6, p. 141; cf. *Arch. Anzeiger*, 1889, p. 91; Daremberg and Saglio, i. p. 821, fig. 1026.

withdrawn through an aperture in the bottom.[1] Similar vases in the "Chalcidian" style are also known. After the beginning of the R.F. period a new type was introduced in the shape of a vessel with a short neck, the body of which bulges out towards its base, and is supported on a high stem; it generally has two small eared handles (Fig. 41). Several R.F. examples are known, of which two are in the British Museum,[2] and three or four in the Louvre; the British Museum also possesses a late B.F. specimen (B 299). The designs are painted in a frieze round the vase.

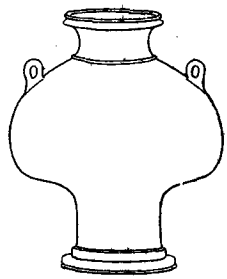


FIG. 41. PSYKTER.

The ἀκρατοφόρος, or vessel for holding unmixed wine, seems to have been another name for the ψυκτήρ; Pollux (vi. 90) says the difference was that it was supported on small knobs (*lit.* small knucklebones) instead of a stem.

Another name identified in antiquity with the ψυκτήρ is that of the δῖνος (sometimes spelled δεῖνος); but the identity was more probably one of usage than of form.[3] As to the latter, there is considerable discrepancy in the accounts of the grammarians[4]; one calls it a deep cup tapering down to a point; another, probably more correctly, since it was certainly not a drinking-vessel, a clay vessel for wine without a base, but rounded underneath. In virtue of this description the name has usually been applied to a class of vase, commoner in the earlier periods than the later, and more often found on Greek sites than on Italian, which has a rounded base without foot, and no handles (Fig. 42).

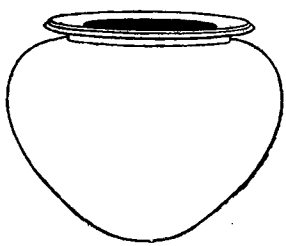


FIG. 42. DEINOS OR LEBES.

[1] A vase of the same type, but probably used as a "puzzle-jug," is published in the *Bull. de Corr. Hell.* xix. pls. 19, 20.

[2] E 767, 768, the latter signed by Duris; see also *J.H.S. l.c.* Another good example is the Euphronios psykter in Petersburg (p. 431).

[3] Cf. Athen. xi. 503 C and 467 D. In § 467 F he identifies the δεῖνος with the ποδανίπτηρ; this use would be parallel to the Homeric use of the λέβης for washing (see below).

[4] Cf. Schol. *in* Ar. *Nub.* 280, 1472 ff.

These vases are found as early as the seventh century in Greece, and were very common at Naukratis, appearing also in most of the B.F. fabrics. That they were used to contain the ashes of the dead is shown by the B.M. example already referred to (p. 146), which belongs to the end of the R.F. period.[1] In Southern Italy this form of vase is generally placed on a separate high moulded stem, and has a cover with an ornamental knob. A variety with hemispherical cover nearly equal in size to the vase itself has been identified with the ἡμίτομος ("cut in half"), a form mentioned by Athenaeus.[2]

This type of vase has more usually been described by the name of λέβης, denoting a kettle or caldron; but though the form of the λέβης was practically the same (as we may gather from the fact of its always being placed on a tripod), the purpose for which it was used (*i.e.* for boiling water) and the fact that it was always of metal, suggest that it is not such an appropriate name as δῖνος for this form of painted vase. The λέβης is constantly mentioned in Homer, both as a cooking-vessel and as a washing-basin.[3] Herodotos[4] says that the Scythians used a λέβης for cooking flesh, which resembled the Lesbian krater, but was much larger. It was also the vessel in which the ram, and subsequently Pelias, were boiled by Medeia; and may be seen depicted in several B.F. representations of that story.[5] A golden lebes was placed at each angle of the temple of Zeus at Olympia.[6] It is also the name of the vessel used by the Boeotians in their ingenious contrivance at the siege of Delion.[7] To its use as a cinerary urn in the tragic poets we have already alluded.

The ordinary name for a cooking-vessel of earthenware in Greece was χύτρα, answering to our "pot": it was used both for water and for solids, as well as for other domestic purposes. Children were exposed in χύτραι[8]; and a boy's game called

[1] Cf. the use of the word λέβης for a cinerary urn by Aeschylus and Sophokles (*Ag.* 444; *Cho.* 686; *El.* 1401).

[2] xi. 470 D. An example in the B.M. is F 306.

[3] *E.g.* *Il.* xxi. 362; *Od.* xix. 386.

[4] iv. 61.

[5] *E.g.* B.M. B 221, B 328.

[6] Paus. v. 10, 4.

[7] Thuc. iv. 100.

[8] Hence the word χυτρισμός. Cf. the episode in Ar. *Thesm.* 505 ff.

χυτρίνδα is described by Pollux[1]; it was apparently played in two ways, either by a boy representing a χύτρα, who was pulled about by the other players until he caught one, or by a boy carrying a pot, with some obscure reference to the story of Midas. There were several proverbial expressions connected with the χύτρα, such as ποικίλλειν χύτρας, "to paint pots," expressive of useless labour, owing to the roughness of the ware; and together with the χοῦς, a vessel only known as a measure (12 kotylae or $5\frac{3}{4}$ pints), it played a part in the festival of the Anthesteria, one day of which was known as Χύτραι καὶ Χόες, or "Pot-and-Pan Day."[2] The word χυτρόπους, used by Hesiod[3] and Aristophanes,[4] seems merely to denote a cooking-pot with feet. The πύραυνοι or κλίβανοι, large clay vessels used either as brasiers or for baking purposes, have been already described in Chapter III.

A few other general words for cooking-vessels and domestic utensils may also be mentioned here. The θερμαντήρ mentioned by Pollux[5] is presumably identical with the θερμοπότις and ἀναφαία of Athenaeus (475 D, 783 F), the former, as its name implies, being a vessel in which hot drinks were prepared. It seems to have been exclusively made of metal, and may, indeed, only be another name for the λέβης. It has, as we have seen, been identified with the κελέβη. Pollux gives a list of vessels used for warming water.[6]

The ἠθμός, or strainer,[7] answers to the modern colander, and is represented by a flat round vessel with long handle, of which some late fictile examples exist.[8] It is mentioned among the vessels in the Sigeian inscription,[9] but is there spelled ἠθμός. Most of the existing specimens are of bronze. The ὁλκεῖον mentioned by Athenaeus[10] appears to have been a bowl used for washing cups. The σκάφη ("boat") is a general term used in the classics for vessels of varied import:

[1] ix. 113-14.
[2] Cf. Ar. *Ach.* 1076.
[3] *Op. et Di.* 748.
[4] *Ran.* 505.
[5] vi. 89 and x. 66.
[6] x. 66.
[7] Eur. *Fr.* 373; Pherekr. Δουλοδ. 4 (*apud* Athen. xi. 480 B).
[8] *B.M. Vases*, iv. G 194.
[9] Roberts, *Gk. Epigraphy*, i. p. 78.
[10] v. 195 C, 199 E: see also Pollux, vi. 100; Plut. *Alex.* 20.

basins, troughs, washing-tubs, bowls, etc.[1] It is the name used in inscriptions relating to the Panathenaic festival to describe the flat dishes or trays borne by the maidens who were called Skaphephori in the procession, as represented on the Parthenon frieze.[2] The diminutive form *σκάφιον* or *σκαφεῖον* also occurs, and is identified with *καλπίον*. The *ὅλμος*, generally used to denote a mortar,[3] also signified a bowl,[4] and had the special signification of the hollow bowl in which the priestess of Apollo sat when delivering oracles from the Delphic tripod. It may here be noted that the word *τρίπους* appears to be used in ancient writers[5] not only for the stand which supported the *λέβης* and other vessels, but for a vessel itself when thus supported on three feet. Most of the existing tripods are made of bronze,[6] but one or two fictile examples are known, including a very remarkable one in Berlin,[7] found at Tanagra, and covered with archaic paintings in the B.F. method.

On bathing and washing vessels our best authority is Pollux (x. 63); it is not, however, likely that they were often of earthenware. The *ποδανιπτήρ* at all events was of metal; it is often seen on R.F. vases with the subject of Theseus killing Procrustes.[8] Large vessels, resembling modern baths, were known by the names of *πύελος* and *ἀσάμινθος*[9]; the *λουτήριον*, or laver, on a high stem, is frequently represented on South Italian vases,[10] but is a purely decorative adjunct. It is there painted white to indicate marble.

The *λεκάνη*[11] should also perhaps be included here, as according to the literary accounts it was a basin used for washing feet or clothes, or for vomiting. It also served the purpose

[1] Ussing, p. 116; Poll. x. 77.

[2] *Brit. Mus. Cat. of Sculpture*, i. p. 166, No. 325ii.

[3] Hdt. i. 200.

[4] Athen. xi. 494 A (*ποτήριον*). See also Liddell and Scott, *s.v.*

[5] See Liddell and Scott, *s.v.*

[6] Cf. B.M. Nos. 587, 588, etc.; also *Olympia*, iv. pl. 34.

[7] *Cat.* 1727.

[8] See Chapter XIV.

[9] Cf. Hom. *Od.* iii. 468, iv. 128, x. 361; *Il.* x. 576; also *J.H.S.* Suppl. iv. p. 139.

[10] *E.g.* F 332 in B.M. (Plate XLV.). An early specimen is given by Wolters in *Jahrbuch*, 1898, p. 26; 1899, p. 126.

[11] See Pollux, x. 76-78; Ar. *Av.* 840, 1143, *Vesp.* 600; Schol. *in Pac.* 1244; Boeckh, *C.I.G.* ii. 3071; and generally, Ussing, p. 118. The name has been conventionally given to a kind of jar; see above, p. 164.

of a mortar, and was used in the game of kottabos. A method of divination sometimes practised was known as λεκανομαντεία and consisted in placing waxen images in a lekane full of water, which became as it were animated and sank, thus signifying the destruction of an enemy. In Pseudo-Callisthenes we read how Nectanebos, the supposed father of Alexander, made use of this procedure.[1]

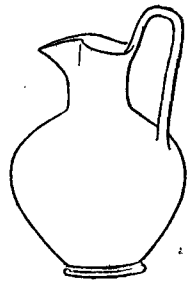


FIG. 43. OINOCHOË (7TH CENTURY).

The next series with which we have to deal is that of vases used for pouring out wine and serving it at the table. They fall into two classes: the wine-jug for pouring, and the ladle for filling it out of the mixing-bowl. We begin with the series of wine-jugs, as being the more important.

Of these the most conspicuous is the **Oinochoë** (οἰνοχόη, from οἶνος, "wine," and χέω, "pour"), one of the most beautiful shapes among Greek vases. It appears in several forms, but the name is generally restricted to one, which corresponds most closely to the modern beer-jug. It is found at all periods, and the form never varies to any marked extent, except that the later examples are rather more graceful than the earlier, and some of the fine R.F. specimens reach the perfection of elegance in form and decoration (Fig. 44). Its chief characteristic is the trefoil-shaped mouth, but this is not invariable, many specimens having a plain circular lip. It is very commonly found in the Rhodian wares of the seventh century, with designs in a continuous frieze (Fig. 43); and a peculiar form appears in an Ionic fabric (see page 359), with egg-shaped body and coarse designs. In the B.F. period the subjects are nearly always in framed panels. Among the R.F. vases of the fine style, many diminutive oinochoae occur, nearly all of which were found at Athens, the subjects being those of children playing with go-carts and other toys, and sometimes

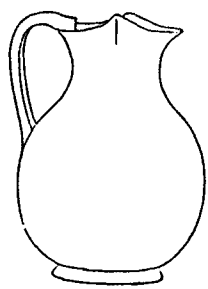


FIG. 44. OINOCHOË (5TH CENTURY).

[1] Budge, *Life and Exploits of Alexander*, p. 4 ff.

with jugs of the same shape. As these appear to have been found in children's tombs, it is evident that these painted specimens were actually used as playthings.[1]

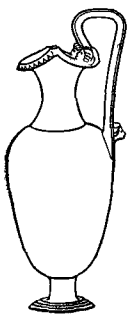


FIG. 45. PROCHOÖS.

The oinochoë is frequently represented in vase-paintings, chiefly in scenes of libation, in which ceremony it was invariably used for pouring wine into the phiale or *patera*, from which the libation was made. It occurs on the Parthenon frieze. In conjunction with the krater, or mixing-bowl, it is seen on a "Cyrenaic" kylix in the B.M. (B 3), in a scene representing a sacrifice. In reference to this may be quoted a curious injunction given by Hesiod (*Op. et Di.* 744),

μηδέ ποτ' οἰνοχόην τιθέμεν κρητῆρος ὕπερθεν πινόντων,

which seems to imply that it was considered an unlucky thing to put the jug back in its place on the edge of the krater during a banquet.[2] Thucydides[3] speaks of silver oinochoae in the temple at Eryx, in conjunction with libation-bowls and incense-burners, and Athenaeus[4] mentions similar offerings at Metapontum.

A variety of the oinochoë, which is not found before the middle of the R.F. period, but becomes very popular in Apulia, has a very high curved handle and tall stem, the body tapering straighter downwards (Fig. 45). This is usually known as the *πρόχοος*, and corresponds in form to our claret-decanter. The *πρόχοος* served the same purpose as the *οἰνοχόη*, and is frequently mentioned in Homer. It was used not only for pouring wine, but for water to wash the hands of guests.[5]

FIG. 46. OLPE.

A third form, usually known as the *ὄλπη* (Fig. 46), is almost cylindrical in shape, with plain or trefoil lip and no marked neck; it is more usually found in the B.F. period.

[1] See p. 137, and B.M. E 533 ff., 548 ff.

[2] Cf. the modern superstition against crossing a knife and fork on a plate.

[3] vi. 46.

[4] xi. 479 F; cf. Boeckh, *C.I.G.* i. 150, line 30 = B.M. *Inscrs.* 29.

[5] *Od.* i. 136; xviii. 398.

In early B.F. wares the subjects on the olpae are usually painted on the *side*, adjoining the handle on the right[1]; they are always in panels. The word is mentioned by Sappho and Ion of Chios.[2]

Lastly, we have a curious form, only found in Apulia, and belonging to the extreme decadence of vase-painting (Fig. 47), which has a flat cylindrical body like a round toilet-box (see Pyxis, p. 198) with moulded edges. This is surmounted by a long narrow neck and beak-like semi-cylindrical mouth[3]; and the whole effect is awkward and inartistic. The name *ἐπίχυσις*, derived from the list given by Pollux,[4] is generally given to this form.

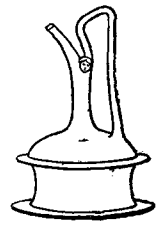


FIG. 47. EPICHYSIS.

For the ladle used for drawing wine out of the krater to fill the oinochoë the ordinary name was *κύαθος* (Lat. *simpulum*). This word also commonly denoted a measure of about one gill. Among the painted vases it is represented by a rare but particularly graceful shape, the body fashioned like a straight-sided bowl, with a high looped handle (Fig. 48). In the early B.F. examples a high stem is added. This shape is not found in the later R.F. period or in Southern Italy. The long handle is obviously for convenience in dipping.

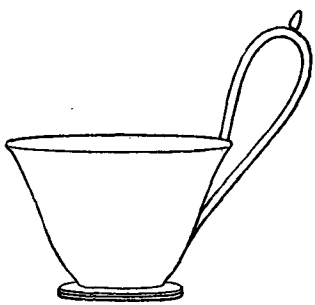


FIG. 48. KYATHOS.

A series of names, all of which are derivatives from the word *ἀρύω*, "draw" (used only of drawing water), appear to represent ladles of various forms and uses. Herodotos[5] mentions the word *ἀρυστήρ*, and the forms *ἀρυστεῖς*, *ἀρυτήρ*, *ἀρυσάνη*, *ἀρυστρίς*, are also found.[6] The *ἀρύταινα* appears to have been a bronze ladle, used in the baths for collecting oil, and for filling lamps.[7] The *ἀρύστιχος*,

[1] *E.g.* B.M. A 1532, B 33, B 52.

[2] Athen. x. 425 D (in form *ὄλπις*); xi. 495 B.

[3] German *Schnabelkanne*. This type of mouth is often seen in the primitive pottery of Cyprus.

[4] vi. 103; x. 92.

[5] ii. 168.

[6] Athen. x. 424 B; xi. 783 F.

[7] Ar. *Eq.* 1091; Pollux, x. 63; Theophr. *Char.* 9.

on the other hand, was a wine-ladle, also known as an ἔφηβος; it appears to have been used in voting in the law-courts.[1] Another word used by Aristophanes is οἰνήρυσις[2]; two parallels to which are the ἐτνήρυσις and ζωμήρυσις of the same author[3] and other comic writers, both words meaning "soup-ladle." It is doubtful if any of these words were in use for fictile utensils.

The next branch of the subject is concerned with the various forms of **Drinking-cups** in use among the Greeks. In these the potters may perhaps be said to have attained their highest excellence, not only in regard to beauty and grace of form, but also, so far as concerns one variety at any rate—the R.F. Athenian kylix—in regard to the decoration. The *locus classicus* on the subject is the eleventh book of Athenaeus, to which frequent reference has already been made[4]; but there are of course frequent references to these cups in Homer and other poets. Athenaeus devotes a discourse by one of his "Doctors at Dinner" entirely to this subject, the different names being discussed in alphabetical order. Many of them are, as will be seen, only alternatives names or nicknames for well-known shapes, while others included in his description are certainly not drinking-cups at all. It must also be borne in mind that many of the names are purely generic, like the Latin *poculum*, and are not intended to connote any special form; this is particularly the case in the descriptions of Homer, where, indeed, we should not look for scientific accuracy.

The ordinary word for a drinking-cup was ποτήριον or ἔκπωμα, but neither is known to Homer[5]; the terms he uses are δέπας, ἄλεισον, and κύπελλον, the first being further defined as ἀμφικύπελλον. The word κισσύβιον[6] may be once for all briefly dismissed; it was so called from κισσός (ivy), probably as being ornamented with ivy-foliage in relief, and was made of wood. It is seldom that Homer's descriptions

[1] Hesych. *s.v.*; Pollux, vi. 19; Athen. x. 424 C; Boeckh, *C.I.G.* ii. 2139; Schol. *in* Ar. *Vesp.* 855.

[2] *Ach.* 245 and Schol.

[3] *Ach.* 1067 and Schol.; Athen. iv. 169 B; Boeckh, *C.I.G.* i. 161, 3.

[4] See also Pollux, x. 66.

[5] It should be noted that the cups he describes are always of metal.

[6] *Od.* ix. 346, xiv. 78; cf. the description in Theocr. i. 26 ff., and see below, p. 185; also Ussing, p. 126.

give any details as to form, and where they do they are difficult to interpret aright. Athenaeus devotes a lengthy section of his discourse to the explanation of the famous cup (δέπας) of Nestor,[1] which he names *νεστορίς* (cf. p. 172), but arrives at no definite conclusion. It has already been pointed out that a hint at its form seems to be given by the gold and silver cups found in Mycenaean tombs, at Mycenae, and Enkomi in Cyprus, although it need not be assumed that these are the products of the civilisation which Homer describes; he may, however, be speaking of traditional forms. Another instance of the δέπας in legend, is in the story of Herakles crossing the ocean in the golden δέπας of the Sun.[2]

Among the names of drinking-cups given by Athenaeus, the following may be taken as used in a purely general sense, without any idea of a particular form.

Ἄμυστις.—A cup from which it is possible to drink at one draught (cf. *κελέβη*, p. 169).

Ἀμφωτις.—A two-handled cup (see under Skyphos, p. 186).

Ἀντίγονις.—A cup named after King Antigonos.

Ἀργυρίς.—A cup of metal (not necessarily silver). Pollux also gives the word *χρυσίς*.

Ἄωτον.—A Cypriote name for a cup ("without handles," from *ἀ* and *οὖς*).

Βαυκαλίς.—An Alexandrine variety, of glass or clay.

Βῆσσα.—Also an Alexandrine form, widening out below.

Γυάλας.—A Megarian name (the form of the word is Doric).

Δακτυλωτόν.—An uncertain form, variously explained.

Δέπαστρον.—A bye-form of δέπας, in use at Kleitor in Arcadia.

Ἐνιαυτός.—Also known as *Ἀμαλθείας κέρας*. See under Rhyton (p. 193).

Ἔφηβος or *ἐμβασικοίτας.*—The significance of these names is not obvious, but see p. 179 for the former.

[1] xi. 488 ff.; cf. *Il.* xi. 632. It is described by Homer as "studded with golden nails; and four handles there were; and about each rested two golden doves; and beneath there were two bottoms."

[2] See Chapter XIII.; and below, p. 186.

Ἡδυποτίς.—A Rhodian name (cf. Pollux, vi. 96). Said to have been made by the Rhodians in competition with the Athenian *Θηρίκλειοι* (see below, p. 189). They were of light make, and not, like the Thericleian cups, for the exclusive use of the rich.

Ἠθάνιον.—Apparently an Egyptian name.

Ἡμίτομος.—An Athenian cup, probably hemispherical (but see above, p. 174).

Ἴσθμιον.—A Cypriote term.

Κελέβη.—See under Krater (p. 169).

Κόνδυ.—An Asiatic name. Menander describes it as holding ten kotylae, or about five pints.

Κρατάνιον or *κρανίον.*—Polemon mentions silver specimens in the temple of Hera and treasury of the Byzantines at Olympia.

Κρουνεῖον.—It is doubtful if this word denotes a cup, as it is catalogued with the *κρατήρ*, *κάδος*, and *ὀλκεῖον.*

Λαβρωνία.—A Persian cup, named from "greedy" drinking (*λαβρότης ἐν τῷ πίνειν*).

Λάκαινα.—A cup made of Laconian clay.

Λέσβιον.

Μάνης.—A cup or bowl placed on the top of the kottabos-stand, and used in the game of kottabos to receive the drops of wine thrown from the kylix (*q.v.*)

Μέλη.

Οἰνιστηρία.—A name given to the wine-cup dedicated to Herakles by the ephebi at the time of entry into that rank.

Ὄλλιξ.—A wooden cup.

Παναθηναικόν.— Probably a variety of the Skyphos (*q.v.*).

Πελίκη.—See under Amphora (p. 163). A generally disputed form.

Πέταχνον.—A wide flat cup (from *πετάννυμι*, "spread").

Πρίστις.

Προυσίας.—Named from the king of Bithynia.

Προχύτης.—Called a cup by Athenaeus, but more probably to be identified with the *πρόχοος* (p. 178).

Ῥέον or *Ῥέοντα.*—Probably a variant of *ῥυτόν.* It is described as taking the form of a Gryphon or Pegasos, both of which occur in rhyta (p. 193).

Σαννακία.—A Persian cup.
Σελευκίς.—A cup named after King Seleukos.
Ταβαίτας.—A wooden cup.
Τραγέλαφος.—Probably a kind of rhyton (p. 193).
Τριήρης.—See p. 186, under *κύμβιον.*
Τστιακόν.
Χαλκιδικόν.—Probably named from the Thracian Chalkidike.
Χόννος.—A bronze cup (perhaps a kind of kylix).
Ὠδός.—A cup associated with the singing of *σκόλια.*
Ὠόν.—An egg-shaped cup.
Ὠοσκύφιον.—A double cup, apparently like an egg standing in an egg-cup.

Pollux also mentions the names *Βησιακόν* and *Καππαδοκικόν*; and Athenaeus describes a *γραμματικὸν ἔκπωμα*, or cup ornamented with letters (in relief), probably a late Hellenistic type.

We now come to the names which can be identified with existing vases, or are described with some indication of their form.

A name which constantly occurs in two forms is the *κοτύλη* or *κότυλος*. The distinction appears to be that the former had no handles, but the latter one,[1] but otherwise the form was probably much the same, being that of a deep cup; it is also probable that it was sometimes used like the *κύαθος*, as a ladle for drawing out wine, as well as for drinking. The word *κοτύλη* is found as early as Homer,[2] used metaphorically for the hollow where the thigh-bone joins the hip; in its proper meaning as a cup, it occurs in the familiar proverb[3] which has been adopted into our language:

πολλὰ μεταξὺ πέλει κοτύλης καὶ χείλεος ἄκροῦ,
"There's many a slip 'twixt the cup and the lip."

As a measure it was equivalent to six kyathi, or roughly half a pint, as already shown (p. 135). The *ἡμικοτύλιον* there discussed is, however, a one-handled cup, and therefore to be called a *κότυλος* rather than a *κοτύλη*. The latter is a word

[1] Poll. vi. 96; Athen. xi. 478 B, F.
[2] *Il.* v. 306.
[3] Athen. xi. 478 E.

constantly found in Greek literature from Homer downwards, as in the passage where Andromache describes the impending fate of her orphan child, to whom a pitying patron will hold out a cup, merely to taste, not to drain.[1]

From Athenaeus we learn that the *κότυλος* was like a deep washing-basin (*λουτήριον*), and that it was associated with Dionysos. Eratosthenes[2] calls it the most beautiful and the best for drinking of all cups. The diminutive form *κοτύλισκος* occurs in connection with the *κέρνος*, discussed below (p. 195), which had many of these little cups attached to it. It has been customary to apply the name *κοτύλη* to a class of vase found at all periods, with flat base, slightly curved sides, and two flat handles level with the rim (Fig. 49); it sometimes attains a considerable size for a drinking-cup, and is usually decorated with one or two figures each side. A notable exception is the beautiful vase in the British Museum (Plate LI.), signed by Hieron, with its frieze of figures all round. This identification is of course at variance with Athenaeus' statement that the kotyle has no handle; but no other satisfactory name has been found for the form.

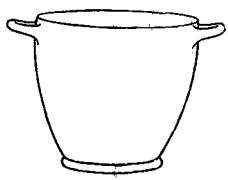


FIG. 49. KOTYLE.

Closely connected, it would seem, with the *κοτύλη* is the cup known as the *σκύφος* or *σκύπφος*, to which there are frequent references in the poets and elsewhere but not in Aristophanes. Homer[3] describes it as a rustic sort of bowl, which held milk; Simonides applies to it the epithet *οὐατόεντα*, or "handled." Athenaeus connects the word with *σκαφίς*, a round wooden vessel which held milk or whey, and this seems to accord with the mention of it in Homer. It was always specially associated with Herakles,[4] who was said to have used it on his expeditions; hence certain varieties were known as *σκύφοι Ἡρακλεωτικοί*, but it is more probable that this word refers to Heraklea Trachinia in Northern Greece. Besides the Herakleotic, Athenaeus

[1] *Il.* xxii. 494. See for other instances of its use, *Od.* xv. 312, xvii. 12 (*πύρνον καὶ κοτύλην*, "bite and sup"); Schol. *ad* Ar. *Plut.* 1054; and Athen. xi. 478-79.

[2] *Apud* Athen. 482 B.

[3] *Od.* xiv. 112. See Athenaeus, xi. 498 for quotations; also Eur. *Cycl.* 256, 390, 556, and Liddell and Scott, *s.v.*

[4] Athen. xi. 500 A; Macrob. v. 21, 16.

mentions specially Boeotian, Rhodian, and Syracusan skyphi. The ordinary shape of the vase may be inferred from the form of that which Herakles is often depicted holding on the monuments[1]; it is of the same type as the *κοτύλη*, but the body tapers below and has a higher foot, while the handles are placed lower down and bent upwards. Among the late black-glazed wares with opaque paintings (p. 488) some examples occur of cups with handles twisted in a kind of knot, and it has been suggested that these represent the "Heraklean knot" described by Athenaeus[2] as to be seen on the handles of these *σκύφοι Ἡρακλεωτικοί*.

The word is also frequently used by Roman authors, and there is a particularly interesting passage in Suetonius (cf. p. 134) alluding to the *Homerici scyphi* adorned with chased designs from the Homeric poems[3] which Nero possessed; these were, of course, metal bowls with reliefs,[4] but they have their fictile counterparts in the so-called Megarian bowls (p. 499).

Athenaeus[5] quotes from the philosopher Poseidonios a passage referring to drinking-cups called *Παναθηναικά*, which may be supposed to have some connection with the Panathenaic festival, and attempts have been made to identify them with a class of skyphi or kotylae of the R.F. period, the invariable subject on which is an owl between two olive-branches (p. 410).[6] There is no doubt some reference to the Athenian goddess, but it is more likely that they represent some kind of official measure (see above, p. 135).

It will be noted that the *σκύφος* appears to have been originally a wooden vessel used as a milking-pail, and it is further identified in Theocritus with the wooden *κισσύβιον*, to which we have already alluded. Two other words are given by Athenaeus to denote large wooden bowls of the type of the

[1] *E.g. B.M. Cat. of Bronzes*, 1244, 1272, 1309-14; Stephani, *Ausruhende Herakles*, pp. 151 ff., 195 ff.

[2] Ἡράκλειος δεσμός (500 A).

[3] The sculptor Mys made a *σκύφος Ἡρακλεωτικός* with the sack of Troy chased upon it (Athen. xi. 782 B).

[4] In *C.I.G.* ii. 2852 silver *σκύφοι* chased with figures of animals are recorded among the offerings in the temple of Apollo at Branchidae.

[5] xi. 495 A.

[6] *E.g.* B.M. E 152, and see *Cat.* iii. p. 14. The owl and olive-branch seem to have been official marks; they appear on coins and dicasts' tickets.

σκύφος, namely the ἄμφωτις and the πέλλα,[1] both used as milking-pails. They were not strictly speaking drinking-cups. Among existing Greek vases this form, viz. a deep straight-sided bowl, such as a carved wooden vessel would naturally take, seems to be best represented by the examples discovered on the site of the Cabeiric temple at Thebes, which are of this shape and of considerable size (see Fig. 98, p. 392).[2]

The βρομίας is described by Athenaeus[3] as a cup resembling the taller skyphi, and the κιβώριον[4] (whence the ecclesiastical Latin *ciborium*[5]) was also a kind of skyphos. The name μαστός should also be included here, from the likeness of the cup to the skyphos. Its characteristic is that it has no foot but only a small knob, and therefore exactly resembles a woman's breast with the nipple, whence its name. In Greek pottery the only known painted examples are of the B.F. period,[6] and these are usually modelled and painted with great care and delicacy. The so-called Megarian bowls (see p. 499) should also be included under this heading, in reference to which it has been pointed out that μαστοί of metal were dedicated in temples at Oropos in Boeotia and at Paphos.[7]

Another form of cup, of which Athenaeus has much to say, is the κύμβιον[8] (other forms being κύμβη and κύββα), which was supposed to represent the κύπελλον of Homer. He describes it as small and deep, without foot or handles. On the other hand, the word also means "a boat," and we further find the words ἄκατος and τριήρης cited by Athenaeus[9] as names of cups, the former being expressly called "a boat-shaped cup." This has the support of the author Didymos (quoted by Athenaeus, 481 F) who says the κύμβιον was a long narrow cup like a ship.[10] A possible instance of it is a long askos-shaped vessel in the British Museum,[11] on which is incised ΓΡΟΡΙΝΕ ΜΗ ΚΑΤΘΗΣ,

[1] xi. 783 D; 495 C; cf. Theocr. i. 25.
[2] Cf. B.M. B 77, 78; *J.H.S.* xiii. p. 78.
[3] xi. 784 D.
[4] See *id.* xi. 477 E.
[5] The word also occurs in Horace (*Od.* ii. 7, 22) for a large wine-cup.
[6] *E.g.* B.M. B 370, 371, 681.
[7] Robert, *Homerische Becker*, p. 3.
[8] xi. 481 D.
[9] xi. 782 F, 500 F.
[10] Cf. Macrob. v. 21: *pocula procera ac navibus similia.* In illustration of the resemblance of a bowl to a ship we may cite the story of the wise men of Gotham, also the golden bowl of the Sun (p. 181), and the form of the Welsh coracle.
[11] F 596.

"Drink, do not lay me down"; but it is not of a form adapted for drinking. The question must therefore remain undecided. Ussing thinks that *κύμβιον* was originally a cup-name, and that the other meaning is derived from it; but, on the other hand, *ἄκατος* and *τριήρης* are merely nicknames as applied to cups.

The *κώθων* is a cup which cannot now be identified, but is often referred to by ancient authors.[1] It seems to have been a Spartan name for a soldier's cup, used for drinking-water, and was adapted by its recurved mouth for straining off mud.[2] It has been conjectured to have been the name for the shape we have above described as a *κοτύλη*, but on no good grounds; Pollux (vii. 162) wrongly classifies it with the *πίθος* and amphora, but it was undoubtedly a cup, as indeed he implies elsewhere (vi. 97). Usually of clay, it is sometimes described as of bronze,[3] and Aristophanes applies to it the epithet *φαεινός*,[4] which suggests a bright metallic surface. Hesychius and Suidas describe it as having one handle. From the *κώθων* was derived the word *κωθωνίζεσθαι*, "to drink hard."[5]

The *κάνθαρος* was a cup so called because of a fancied resemblance to an inverted beetle.[6] It was specially associated with Dionysos,[7] and from this fact its form has been identified with certainty from the two-handled drinking-cup which he is so often depicted holding, especially on B.F. vases. It is a very beautiful though for some reason never a very popular shape in pottery, and is found at all periods.[8] In form it may be described as a deep straight-sided cup on a high stem, with loop-shaped handles starting from the rim each side and coming

[1] Athen. xi. 483 B.

[2] Cf. Ar. *Eq.* 600, and see the account of this cup given by Plutarch, *Lycurg.* 9. The word for the inner rim or lip is *ἄμβων* (Pollux, vi. 97; Critias *apud* Athen. xi. 483 B; see *ibid.* viii. p. 347 B). The shape formerly regarded as a *κώθων* on account of its recurved lip has been thought by Pernice to have been used for incense (*Jahrbuch*, 1899, p. 60); but see above, p. 140.

[3] Boeckh, *C.I.G.* i. 161.

[4] *Pac.* 1094.

[5] Athen. xi. 483 F.

[6] *Ibid.* 473 D.

[7] Macrob. v. 21.

[8] See *J.H.S.* xviii. p. 288. For typical examples see Athens 612 and *Bull. de Corr. Hell.* 1897, p. 450 (Boeotian); also Berlin 1737, 2116-20, 2876, 2877, 4019; *Anzeiger*, 1891, p. 116.

down to the lower edge of the body (Fig. 50). Probably it was considered a difficult shape to produce in pottery, and was commoner in metal examples.

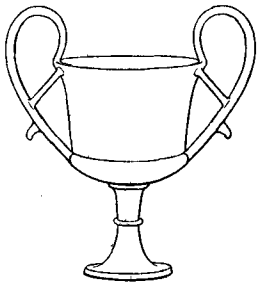


FIG. 50. KANTHAROS.

At all events the *καρχήσιον*, a similar kind of cup, seems to have been consistently made of metal. Athenaeus[1] describes it with more than usual detail as tall, moderately contracted in the middle, with handles reaching to the bottom (*i.e.* of the bowl). The form is to be recognised on the monuments (if not in actual examples[2]) as a variation of the *κάνθαρος* in which the body has a sort of "waist," bulging out again below. Virgil mentions *carchesia*,[3] and silver specimens were among the dedications in the Parthenon at Athens.[4]

Of all the ancient forms of drinking-cup, the most celebrated and in some respects also the most beautiful, was the **Kylix** (*κύλιξ*, Lat. *calix*),[5] a two-handled cup of varying size, with large bowl on a high stem. The shape of this vase shows a continuous development, as does also its decorative treatment, from the most primitive times down to the end of Greek vase-painting. It was moreover the form which the great artists of the early part of the fifth century selected as the medium of their finest efforts. The kylix played an important part at the banquet, being not only one of the commonest forms of drinking-cup in use, but as being also used in the game of kottabos (see Chapter XV.). In the banqueting-scenes which are so popular a subject on the R.F. kylikes of the best period, the guests are often represented twirling vases of this shape on one finger crooked through the handle; this being the manner in which they discharged the drops of wine at the mark. Hence the kylix was also known as *ἀγκύλη* or *κοτταβίς*. When

[1] xi. 474 E; cf. v. 198 B, C.

[2] *E.g.* Visconti, *Mus. Pio-Clem.* iv. pl. 35; *B.M. Cat. of Terracottas*, B 490.

[3] *Georg.* iv. 380.

[4] Boeckh, *C.I.G.* i. 140, 141, 150 = *B.M. Inscrs.* 27-29.

[5] So called from being turned (*κυλίεσθαι*) on the wheel (Athen. xi. 480 B). The word constantly occurs in literature: Phokyl. 11; Sappho, 5; Hdt. iv. 70, etc.

not in use the kylix was hung on a peg on the wall, as it is sometimes depicted on R.F. vases.[1]

Athenaeus[2] cites the Athenian and Argive kylikes as being of special repute; the latter are described by Simonides as *φοξίχειλος*, a word of doubtful meaning.[3] In the former's own city of Naukratis a special kind of kylix[4] was made by hand (not on the wheel), with four handles and a very flat base, and this was dipped in a solution of silver to give it a metallic appearance.[5] Lacedaemonian, Chian, and Teian kylikes are also mentioned (the last-named by Alcaeus: see p. 64). But the most famous variety was the Thericleian, so named from Therikles, a Corinthian potter contemporary with Aristophanes. These cups were chiefly made at Athens; they are frequently mentioned by Middle and New Comedy writers, and are described by Athenaeus[6] as depressed round the sides, deep, with short handles. They were imitated in wood or glass, and gilded, and Athenaeus mentions that the Rhodians made *ἡδυποτίδες* (see above) in emulation of them.[7]

Besides the various diminutive forms of *κύλιξ*, such as *κυλίχνη* (see above, p. 133), *κυλίσκη*, etc.,[8] there is a long list of synonyms for this form, about most of which, however, there is nothing to say except that they are probably mere nicknames. Athenaeus gives the following: *Κονώνιος*, *Λάκαινα*, *λοιβάσιον*, *πεντάπλοον*, *σκάλλιον*, *χαλκόστομος*, *χόννος*, and *μαθαλίς*; also *μετάνιπτρον*, from its use after the washing of the hands, *i.e.* at the end of the meal; *Προυσίας*, named from a king of Bithynia; and *φιλοτησία*, corresponding to our "loving-cup."[9]

In the history of Greek vase-painting the kylix is a shape known and popular at all periods, from the Mycenaean Age down to the end of the fifth century; in the fabrics of Southern

[1] *E.g.* B.M. E 49, 50. Cf. Hermippus *apud* Athen. xi. 480 E, and the Ficoroni cista (Roscher, i. p. 527).

[2] xi. 480 C (quoting Pindar).

[3] See p. 215.

[4] Athen. xi. 480 E.

[5] This was also done in the case of some late Italian fabrics; see *B.M. Cat. of Vases*, iv. p. 25 and below, p. 501.

[6] xi. 470 E, 471 D; cf. v. 199 B.

[7] xi. 469 B. In § 464 C he speaks of *Ῥοδιακαὶ χυτρίδες*, which lessened the tendency to inebriety, and in § 496 F he describes a cup called *Ῥοδίας*.

[8] Pollux, vi. 95-98; x. 66.

[9] Ar. *Lys.* 203.

Italy it but seldom occurs. The Mycenaean form is peculiarly graceful, with its tall stem and swelling bowl; it is generally decorated with a cuttle-fish, a motive well suited to its outlines (see Plate XV.).

During the archaic period of Greek vases a steady development can be traced, both in form and methods of decoration, until the outburst of the R.F. style. The early Corinthian specimens (cf. p. 313) are somewhat cumbrous, with very low stem, shallow bowl with heavy overhanging lip and small handles; in strong contrast thereto are the Cyrenaic cups (p. 341 ff.), which are in execution quite in advance of their time (first half of sixth century); their graceful, delicate forms are evidently imitated from metal. These early cups are as a rule covered with a cream-coloured or buff slip and decorated all over, and the interior designs, which cover the whole or almost the whole of the inside, are a marked feature of these types.

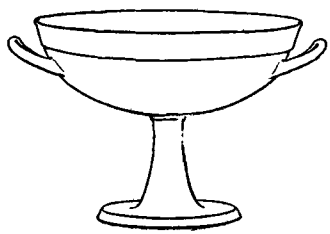


FIG. 51. KYLIX (EARLIER FORM).

Turning to the Attic fabrics we find that in the beginning of the sixth century the prevalent form (evolved from the Corinthian type) has a high stem and deep bowl with off-set lip, the decoration being confined to the upper band of the exterior, in the form of a frieze (Fig. 51). This type is also illustrated by a small Rhodian group in the British Museum,[1] which, however, has elaborate interior designs. In the next stage, represented by the Minor Artists (see p. 379 ff.), the form remains the same, but the manner of decoration is different, interior designs again appearing; often the design is confined to a narrow band, the rest of the exterior being coloured black. Lastly, towards the end of the fifth century, an entirely new form is introduced, in which the break in the outline disappears and the bowl becomes flatter, with a gracefully-curved convex outline, while the stem is shortened (Fig. 52). This form is the one adopted throughout the R.F. period, with few exceptions, and it is possible that it was

[1] B 379-82.

actually invented by the earliest R.F. artists, such as Nikosthenes and Pamphaios, though it is also employed by Exekias.[1] The methods of decoration cannot however be treated of here.

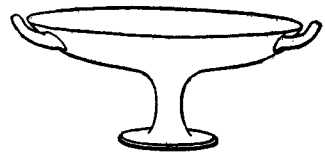


FIG. 52. KYLIX (LATER FORM).

An extremely delicate form of kylix is used by the potter Sotades (Chapter X.), with handles in imitation of a bird's merrythought. Towards the end of the fifth century the shape changes somewhat, the stem disappearing and the bowl becoming deeper. In Southern Italy the kylix-form is only represented by gigantic shallow bowls, with small stout handles attached to the rim, probably intended for hanging against the wall. The Naucratite kylikes mentioned above seem to have been made somewhat after this pattern ; it was at any rate typical of Hellenistic taste.

The word φιάλη [2] (Lat. *patera*) bore in Greek a very different meaning from that suggested by the modern word *phial.* It was in fact a shallow bowl shaped like a saucer, and had no handle, but in place of one a boss (ὄμφαλος) in the centre, which was hollowed out underneath in order to admit of the insertion of a thumb or finger (Fig. 53). Hence it was generally styled μεσόμφαλος or ὀμφαλωτός.[3] As a vase-form it is not of frequent occurrence, and was probably more frequently made in metal, especially in the Hellenistic period. Those depicted on painted vases are usually indicated as having ribbed or fluted exteriors, which can only denote metal (cf. Vol. II. Fig. 132). About the third or second century B.C. imitations of metal phialae in terracotta, with moulded interior designs, are of common occurrence. Being signed by potters residing at Cales, they are

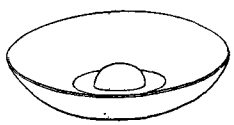


FIG. 53. PHIALE.

[1] A recent writer (Böhlau, in *Athen. Mitth.* for 1900, p. 40 ff.) attributes this shape to an Ionic origin.

[2] See generally Athen. xi. 501 ff. Isidorus (*Etym.* xx. 5) says : "Phyalae dictae quod ex vitro fiant" (*sc.* ὕαλον).

[3] The words βαλανωτή, βαλανειόμφαλος, and καρυωτή also seem to be descriptive of this type. Phialae (καρυωταί) dedicated to Agathe Tyche, Themis, Leto, and Hekate, were among the possessions of the temple of Apollo at Branchidae (Boeckh, *C.I.G.* ii. 2852).

usually known as "Calene phialae." There are two in the British Museum,[1] which are an exact reproduction of silver specimens in the same collection.

Homer uses the word in two senses: (1) as equivalent to a λέβης, as if used for boiling water[2]; (2) as a cinerary urn.[3] Obviously in both these cases the significance of this particular word must not be pressed. Later, however, we find very frequent mention of the phiale in classical authors, such as Herodotos, Pindar, and Plato, in all cases with the same restricted significance, that of a vessel used in making libations. On the R.F. vases it appears in countless examples, used in this manner, especially by Nike. Aristotle, by way of illustrating the inversion of a simile, says "You may call the shield the phiale of Ares, or the phiale the shield of Dionysos," no doubt with reference to its buckler-like shape.[4] Athenaeus (xi. 462 D) quotes a passage from Xenophanes which implies its use for holding perfumes at banquets.

Many words occur as synonyms of φιάλη, such as the αἰακίς, ἄροτρον, λυκιουργεῖς, ῥυσίς, φθοίς, βατιάκιον, and λεπάστη.[5] The last-named word has been suggested above (p. 165) for a kind of large covered dish or bowl, but we can only ascertain that it was a drinking-vessel of some kind, resembling a large kylix.[6]

The ῥυτόν, or drinking-horn (from ῥέω, "flow"), is a familiar shape in the R.F. and later styles, but as a vase-form does not occur before the middle of the fifth century.[7] Its peculiarities were: firstly, that it could not be set down without drinking the contents; secondly, that the narrow end was almost always modelled in the form of the head of some animal, or of a woman or Satyr. Some examples are known in the form of two heads back to back, usually a Satyr and a Maenad, but these having a flat circular base are an exception to the first rule noted above, and partake more of the nature of a cup than of a drinking-horn. Although no archaic examples have been preserved,

[1] G 117, 118: see Plate XLVIII.

[2] *Il.* xxiii. 270, where it is described as ἀπυρωτός, implying that it was used over a fire.

[3] *Ibid.* l. 243.

[4] *Rhet.* iii. 4: cf. Athen. x. 433 C.

[5] See Athen. xi. *s.vv.*; also Pollux, vi. 98.

[6] Schol. *in* Ar. *Pac.* 916.

[7] Cf. B.M. E 784-803.

the rhyton, or *κέρας*,[1] as it is also called, frequently appears on B.F. vases, being generally held by Satyrs or revellers, or by Dionysos.[2] Athenaeus says it was a form reserved for the use of heroes, and that *κέρας* was the older name for it.[3] Among the South Italian vases, it is found almost exclusively in Apulia, and these belong to the decadence of the Apulian style, the paintings being limited to a figure of Eros, or a woman, and little more. These rhyta have one handle, and the cup-part is generally cylindrical in form, tapering slightly towards the lower part, where the head is attached (Fig. 54). In some instances the form is narrower and more elongated, with fluted body. The animals' heads are usually left unvarnished, and coloured in detail like the terracotta figures; the mouth often forms a spout from which the liquid could be allowed to run out.[4] The heads, which occur in great variety, include the panther, fox, wolf, horse, goat, mule, deer, and dog[5]; also Gryphons and Pegasi (see below). Athenaeus mentions a vase called the *τραγέλαφος*,[6] which was doubtless a rhyton ending in two heads, a goat and a deer conjoined, like some known specimens; he also quotes a description of another called *ἐλέφας*, explained as a rhyton with two spouts (*δίκρουνος*).[7] Further, under the heading *ῥέοντα*, which is doubtless a synonym for *ῥυτόν*, he mentions one in the form of a Gryphon, another in the form of a Pegasos.[8] The name is mentioned by Demosthenes, together with *κύμβια* and *φιάλαι*.[9] It is worthy of mention that among the Mycenaean objects discovered at Enkomi in Cyprus, in 1896, and now in the British Museum,

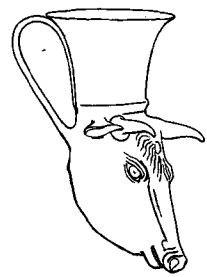


FIG. 54. RHYTON.

[1] See for a discussion of this word, Athen. xi. 476 A.

[2] *E.g.* B.M. B 42, 46, 181, 204, etc.

[3] xi. 461 B, 497 B.

[4] *διατετρημένον*, Athen. xi. 497 E.

[5] Exx. in B.M. F 417-36.

[6] xi. 500 E. In the temple of Apollo at Branchidae there were *παλίμποτοι*, *τραγέλαφοι*, *πρότομοι*, with dedicatory inscriptions to Apollo and Artemis; evidently *rhyta* of this kind (Boeckh, *C.I.G.* ii. 2852). An example in the B.M. (F 431) ends in the heads of a boar and dog conjoined.

[7] xi. 468 F; cf. 497 A.

[8] xi. 496 E; other names for the rhyton are *δικέρας* (Pollux, vi. 97), *ἐνιαυτός*, *ὅλμος*, and *παλίμποτος*: see note 6.

[9] *In Meid.* 565 fin.

there are two or three rhyta in porcelain, corresponding in form to those of the R.F. period, and of very advanced style [1]; they are in fact quite unique.

A few comparatively unimportant names of vessels for holding food and liquids at the table may next be discussed.

The names given for dishes are *δισκός*, *παροψίς*, and *τρύβλιον*, the latter of which frequently occurs in Aristophanes, but *παροψίς* seems to be of late introduction, and more used by the Romans (see Chapter XXI.).[2] For a plate the usual name was *πίναξ* (also *πινακίον*, *πινακίσκος*), a form which is interesting as often occurring among painted vases (Fig. 55). It is found at all periods, from the fabrics of Rhodes and Naukratis down to the Apulian and Campanian "fish-plates," which have a sinking in the centre, and are painted with fish, shell-fish, etc. They were no doubt used for eating fish, the sinking being for the sauce.[3] A famous early instance of the pinax is the "Euphorbos-plate" in the British Museum (see p. 335). The name is also given to the square plaques or tablets, such as those found at Corinth, on the Athenian Acropolis, and elsewhere, which were generally of a votive character. They are often depicted on the vases themselves, indicating the locality of a shrine.[4]

FIG. 55. PINAX.

Vessels for holding vinegar or sauces were known by the names of *ὀξύβαφον*, *ὀξίς*, or *ἐμβάφιον*.[5] The shapes are not exactly known, but they were apparently small cups or dishes; the incorrect identification of the first-named with the *κρατήρ* we have already discussed (p. 171). The words *ἐρεύς* and *κυψελίς* are given by Pollux [6] as vases for holding sweets, and the *κυμινοδόκον* or *κυμινοθήκη* was, as the name implies, a box or receptacle

[1] See p. 127 and Plate X.

[2] Pollux, vi. 84-5; x. 86; Ar. *passim*; Lucian, *Somn.* 14, p. 723 (*τρύβλιον*); see Ussing, *De nom. vas. graec.* p. 160 ff.

[3] Schöne in *Comm. phil. in hon. Mommseni*, p. 653, mentions a plate with ΙΧΘΥΑΙ inscribed underneath. Cf. also Plate XLIV. and p. 487.

[4] See p. 139.

[5] Pollux, vi. 85; x. 86; Ar. *Ran.* 1440, *Plut.* 812, *Av.* 361; Athen. ii. 67 D, xi. 494 C. Cf. for these words Chapter XVII.

[6] x. 92. Liddell and Scott state that *ἐρεύς* is a *vox nihili*.

for spices.[1] The last-named has been identified with the κέρνος, described by Athenaeus as "a round vessel, having attached several little kotylae (κοτυλίσκους)."[2] Two existing forms correspond in some degree to this description: one found in Cyprus and at Corinth, and consisting of a hollow ring, to which small cups or jars are attached at intervals; the other found chiefly in Melos, and consisting of a central stand, round which are grouped a varying number of alabastron-like vases, evidently designed for holding small quantities of unguents or perfumes, or perhaps flowers, eggs, or other objects. They are all of very early date, and decorated in primitive fashion.[3] A better form of the word seems to be κέρχνος. Many have been found at Eleusis,[4] and it is supposed that they were used in the Mysteries for carrying the first-fruits.[5]

Several kinds of vases were used for holding oil, the characteristic of all these shapes being the narrow neck and small mouth, which were better adapted for pouring the liquid drop by drop. The ordinary Greek word for an oil-flask is λήκυθος, frequently found in Aristophanes and elsewhere. We have already referred (pp. 132, 143) to the passages in the *Ecclesiazusae* where the practice of placing lekythi on tombs, and generally of using them for funeral purposes, finds allusion. From these passages it has been possible to identify the class of white-ground Athenian vases on which funeral subjects are painted, with absolute certainty as **Lekythi**. But the shape is not confined to this one class. In the early B.F. period (especially in Corinthian wares) it assumes a less elegant form, with cup-shaped mouth, short thick neck, and quasi-cylindrical body tapering slightly upwards (cf. the alabastron below). The later form, which prevails from the middle of the B.F. period down to the end of the fourth century at Athens, with very little variation of form, is one of the most beautiful types of Greek vases (Fig. 56). It has a long neck, to which the handle is attached, flat or almost concave shoulder, and cylindrical

[1] Pollux, x. 93.

[2] xi. 476 E.

[3] See *Brit. School Annual*, iii. (1896-97) p. 58; *Ath. Mitth.* 1898, p. 271; Couve in Daremberg and Saglio's *Dict. s.v.* Kernos. Athenaeus cannot have known this type.

[4] *Ath. Mitth.* 1898, pls. 13, 14; *Ephem. Arch.* 1885, pl. 9, 1897, p. 163 ff.

[5] *Ath. Mitth. loc. cit.* p. 295.

body, semi-oval at the base. The B.F. examples are seldom found in Italy, and almost all come from Athens and other Hellenic sites, or from Sicily, a country in which the form seems to have been exceptionally popular. The same may be said of the ordinary R.F. examples, which have no sepulchral reference, and are found in large numbers at Gela (Terranuova) in Sicily, but seldom elsewhere. The white lekythi have been found in Eretria, and at Gela, and Locri in Southern Italy, besides Athens. The lekythos seldom attains to any great size, except in the marble examples used as tombstones. They were probably used at the bath and in the gymnasium, and may also have served other purposes, *e.g.* for pigments. In illustration of this reference may be made to the well-known passage in Aristophanes' *Frogs* (1200 ff.), where the jeer of Aeschylos at Euripides' stereotyped beginnings of his plays, ληκύθιον ἀπώλεσεν, seems to imply "he is hard up for something new to say," *i.e.* "he has lost his paint-pot; his lines need embellishment."

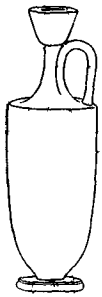


FIG. 56. LEKYTHOS.

Towards the end of the fifth century the lekythos takes a new departure (Fig. 57), and appears with a squat, almost spherical body, without foot (except for the base-ring). This form is sometimes known as *aryballos* (see below), but is perhaps more accurately described as a "wide-bodied" (Germ. *bauchige*) lekythos. It is very popular at Athens in the late fine or polychrome vases,[1] and was adopted exclusively in Southern Italy, where it is the only form of lekythos found. This type of vase is often found in the period of the Decadence with a subject moulded in relief attached to the front, sometimes of a comic nature.

FIG. 57. LEKYTHOS (LATER FORM).

The *alabastron* (ἀλάβαστρον or ἀλάβαστος, both forms being found in Classical Greek) is a shape closely allied to the lekythos. It preserves the same form throughout the period of Greek vase-painting (Fig. 58), but is not often found

[1] See *Jahrbuch*, 1894, p. 57 ff.

after the middle of the sixth century. In the early Corinthian wares it is very common. The name is derived from the material of which it was originally made, and many examples of alabaster vases of this shape have been found in excavations. It was chiefly used for holding oil, unguents, and cosmetics, and is often represented in scenes of ladies' toilet as in use for these purposes. Its characteristics are a flat round top with small orifice, short neck, and more or less cylindrical body with rounded-off base, intended for placing in a stand (*ἀλαβαστοθήκη*).[1] It is generally without handles, but when they occur they are in the form of two small ears, through which a cord was passed for carrying or suspending it. The "alabaster box" of the Gospels was a vessel of this form (cf. the original Greek), and it was broken by knocking off the top, in order that the contents might flow out quickly. The name *βῆσσα* is also given as a synonym of the *ἀλάβαστρον*.[2]

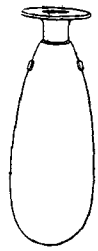


FIG. 58. ALABASTRON.

Another vase of the same type is that known as the *ἀρύβαλλος*. The derivation of the word is unknown, but the first half connects it with the "ladle" class of vases (*ἀρυτήρ*, etc.), of which we have already spoken. It can, however, hardly be a vase of that type, and the connection seems to be its use in the bath,[3] *i.e.* as an oil-flask. It is generally described as resembling a purse; Athenaeus[4] says it is broader below than above, like a purse tied at the neck with a string. The name, however, is usually applied to a form of vase akin to the alabastron, but with small globular body, handle, and very short neck (Fig. 59). This type is almost confined to the Corinthian and other early fabrics, and frequently occurs in glazed or enamelled ware (see p. 127). Its connection with

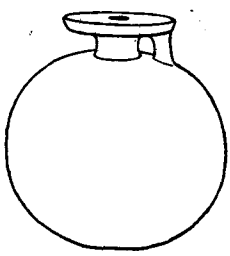


FIG. 59. ARYBALLOS.

[1] Cf. Dem. *Fals. Leg.* p. 415, and p. 133 above.

[2] Athen. xi. 784 B.

[3] See Pollux, vii. 166; x. 63.

[4] xi. 783 F; he derives the *-βαλλος* from *βαλάντιον* (*sic*). He also says it is like the *ἀρύστιχος*, and that *ἀρυστίς* = *πρόχοος*.

the bath is undoubted, and it was generally carried on a string, together with a strigil or flesh-scraper. As this form died out in the sixth century, the name has been used, as noted above, for a later variety of the lekythos, in which the body approaches a globular form.

Transitional between the alabastron and the aryballos is a type of which some examples occur among early Corinthian wares, with egg-shaped body, flat round top, and small ear-like handle, the base being rounded off. To this the name *βομβύλιος* has been tentatively given, on the authority of Antisthenes, who defines the word as meaning a kind of lekythos with narrow neck.[1] In the same passage of Athenaeus[2] it is contrasted with the quickly-emptied *φιάλη* or bowl; those who drink from it must do so drop by drop (*κατὰ μικρὸν στάζοντες*). The name may denote a cocoon, the shape of which this vase resembles, or may be imitative, from the gurgling sound made by a liquid poured therefrom. The *ἐξάλειπτρον* was also probably a kind of oil-flask.[3]

A few forms of vases were exclusively devoted to feminine use. These include the *πυξίς*, a cylindrical box with cover, in which jewellery or other objects such as hair-pins, cosmetics, etc., might be kept for use in the toilet (Fig. 60). The painted examples of this form, which nearly all belong to the later R.F. period, are usually decorated with appropriate subjects, women at their toilet, preparations for weddings, etc. The *σμηματοθήκη*, or soap-box, served similar purposes.[4] It seems to be represented by a form of vase of which the British Museum possesses a specimen (without figure decoration), with cover and high stem, but no handle except the knob on the cover. It is intermediate in form between the pyxis and the so-called *λεπαστή* (p. 165), and

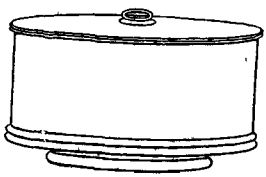


FIG. 60. PYXIS.

[1] See Athen. xi. 784 D; Pollux, vi. 98; Hippokrates, 494, 55.

[2] He somewhat vaguely identifies it with the Thericleian and Rhodian kylikes. Pollux (vi. 98) also implies it to be a cup.

[3] See Ussing, p. 117; Pollux, vi. 106, x. 121; Ar. *Ach.* 1063.

[4] Hesych. *s.v.* *ῥύμμα.* Also called *σμηματοδοκίς.*

sometimes appears in toilet and other scenes.[1] A rare form, found almost exclusively in the R.F. period,[2] consisting of a globular vase with vertical looped handles on a high stem, has been variously named, but the latest theory is that it represents a λέβης γαμικός.[3] It contained lustral water, and is usually decorated with bridal scenes. One is depicted in a toilet scene on a pyxis in the British Museum.[4]

Lastly, a peculiar semi-cylindrical vessel, closed at one end and open down the side (Fig. 61), was for a long time a puzzle to archaeologists, but its use was finally determined by its appearance in a vase-painting.[5] It is there held by a seated woman, fitted over her knee and thigh, and was used while spinning to pass the thread over. The name of these objects is given by Pollux (vii. 32) as ἐπίνητρον or ὄνος ("the donkey"). Several of them are painted with spinning scenes, and the vase-painting alluded to above is curiously enough on a vase of this form.

FIG. 61. EPINETRON OR ONOS.

There is a type of vase, of which two or three varieties occur, which, from its general likeness to a wine-skin, is usually styled **Askos**. It does not, however, appear that there is any direct authority for this, at least in literary records; where the word does occur, it always denotes a leather skin, such as is sometimes depicted on the vases, carried by a Seilenos or Satyr. It is, however, a convenient expression, and there is no other recorded term which can on any grounds be associated with this type.

The earliest examples, which date from the middle of the R.F. period, have a flat round body with convex top, and a projecting spout (Fig. 62); the handle is sometimes arched over the back to meet the spout, or else takes a separate ring-like

[1] *E.g.* B.M. 208, 225, 376, 386, 794, 810, D65. But see on this shape Pernice in *Jahrbuch*, 1899, p. 68, and Robinson in *Boston Mus. Report*, 1899, p. 73. The latter rejects Pernice's incense-burner theory (see above, p. 140), and suggests their use for perfume or scented water.

[2] The B.M. has a late B.F. example, B298.

[3] *Jahrbuch*, 1899, p. 129.

[4] E774; E810 in the B.M. is a good example of this form.

[5] It was formerly thought to be a kind of roof-tile. See Robert in Ἐφ. Ἀρχ. 1892, p. 247; B.M. B597, 598; Athens 1588-92.

form.[1] They are usually decorated with two small figures, one on each side. In the vases of Southern Italy a new form appears (Fig. 63), chiefly found in Apulia, in which the resemblance to a wine-skin is much more apparent, the tied-up pairs of legs being represented by the spout or a projection The handle is usually arched over the back, and the pouch-shaped body sometimes assumes an almost birdlike form.

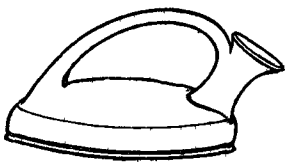


FIG. 62. ASKOS.

A variety which is also common in Southern Italy is made of plain black ware, and is not painted but has a subject in relief in a medallion on the top[2]; the handle is ring-shaped[3] and the form generally resembles the variety first described, except that the body is flat on the top, and convex below, with a base-ring (Fig. 64). It seems probable that these vases were used for holding oil for feeding lamps, and consequently they are generally known by the Latin name of *guttus*, or "lamp-feeder" (see pp. 211, 503). Whether the painted aski were used for the same purpose is doubtful; those, however, with the large body seem to have been intended for other purposes, especially as they often have a strainer inserted in them. Some indeed appear to have been used as rattles, and still contain small balls or pebbles, placed within them for that purpose. On the whole, however, it seems more convenient to reckon the *ἀσκοί* with the oil-vases.[4]

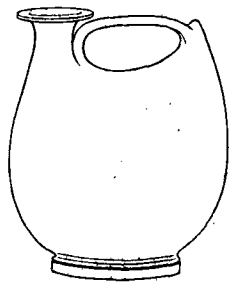


FIG. 63. APULIAN ASKOS.

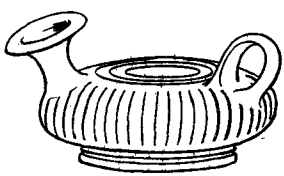


FIG. 64. SO-CALLED "GUTTUS."

Among vases which do not exactly fall under the heading of any particular shape may be noted certain types of moulded

[1] See *B.M. Cat. of Vases*, iii. p. 17.

[2] See *op. cit.* iv. p. 8, fig. 18.

[3] In the examples from Greek sites, such as the Cyrenaica, the handle is arched over the back, as in Fig. 62.

[4] For the Mycenaean "false amphora," a variation of the askos, see p. 271 and Plate XV.

vases, and those with reliefs modelled on them or attached. Many of these almost fall under the category of terracotta figures, but still must be reckoned as vases, even when painted in the methods of terracottas rather than pottery. Such are the large aski described on page 119, and the contemporary ornamental vases modelled in the form of female heads, of Maenads, or of Athena (as B.M. G 1). Other types we have described elsewhere,[1] such as the rhyta ending in animals' heads, the kanthari and rhyta of the R.F. period in the form of human or Dionysiac heads, and the analogous vases of the archaic period. Again, there are such forms as the flasks with flat circular bodies, and the large pyxides which are often found in Southern Italy.[2] They usually bear a subject in relief, covered with a white slip and painted in pink and blue, like the Canosa vases; a specimen from Pompeii, with rich remains of colouring, has lately been acquired by the British Museum. The curious type of vase sometimes found in Sicily, with a tall conical cover, the ornamentation being partly in encaustic, partly in gilded relief, has been already mentioned.[3] There is also a late variety of the so-called kernos (p. 195), consisting of four cups united on an elaborate fluted stand, of which the British Museum possesses two good examples.[4]

It should be borne in mind that all these exceptional shapes are probably imitations of metal-work, perhaps made for the benefit of those who could not afford the more expensive material, just as imitation jewellery was sometimes made in gilt terracotta. Throughout the Hellenistic period (to which the classes we are discussing chiefly belong), the universal tendency is to substitute metal vases for pottery, and moulded or relief-wares for painted decoration, and the potter, finding the painted vases were no longer appreciated, was forced to confine himself to imitating metal, and thus keep abreast with the new fashion. The whole subject of the plastic decoration of vases has been more fully dealt with elsewhere (Chapter XI.).

[1] See Chapter XI. for a general discussion of the subject, and Chapter V. for its technical aspect.

[2] *B.M. Cat. of Terracottas*, D 204 ff.

[3] See p. 88; also *B.M. Cat. of Terracottas*, D 1-2; *Röm. Mitth.* 1897, p. 262.

[4] *Cat. of Terracottas*, D 209-10.

CHAPTER V

TECHNICAL PROCESSES

Nature of clay—Places whence obtained—Hand-made vases—Invention of potter's wheel—Methods of modelling—Moulded vases and relief-decoration—Baking—Potteries and furnaces—Painted vases and their classification—Black varnish—Methods of painting—Instruments and colours employed—Status of potters in antiquity.

IN this chapter we propose to deal with the various technical processes required for the manufacture of painted vases, that being of all the methods of working in clay employed by the Greeks the most important, and thus, as already implied, forming the main branch of our subject. These vases show, in fact, the highest point of perfection to which the ceramic art attained.

In the making of Greek vases we can distinguish four separate stages: (1) Preparation of the clay; (2) Modelling (*a*) on the wheel, (*b*) by hand, or (*c*) from a mould; (3) Baking; (4) Painting, glazing, and other decoration. The last-named is not absolutely essential, *i.e.* a vase, especially one for ordinary daily use, may be considered complete without it. Further, the three first stages are practically the same at all periods of Greek art, whereas the systems of painting and decoration are subject to local variations and chronological development. For the purposes of the present chapter it is sufficient to consider only those vases which have undergone the complete process of manufacture, or what are known for the purposes of study as "Painted Greek Vases."

1. PREPARATION OF THE CLAY

The paste of these vases is similar to terracotta in its general characteristics, such as the constitution of the mixture of which

it is composed; it is in general very delicate, but deeper in tone and finer in texture than that of the terracottas. Brongniart has described it as "tender, easily scratched or cut with a knife, remarkably fine and homogeneous, but of loose texture"[1]; but it would be more accurate to say that it varies in one respect, being sometimes so hard that cutting or scratching has no effect upon it. When broken it exhibits a dull opaque colour, varying from red to yellow and yellow to grey. On being struck it gives forth a dull metallic sound; it is exceedingly porous, and easily allows water to ooze through.

The surface was protected by a fine, thin alkaline glaze, which is semi-transparent, enhancing the colours with which the vase was painted, like the varnish of a picture. It is this glaze which forms the special distinction of the Greek painted vases and renders them, in contradistinction to common pottery or earthenware, the counterpart of the medieval faïences or majolicas, or the finer porcelain of the present day.

As to the chemical composition of the paste, it would seem that hitherto investigations have been confined to vases of Italian origin, but probably those found on Greek soil would yield similar results. The principal ingredients are clay, silicic acid, and iron oxide, with slight admixtures of carbonate of lime and magnesia. The principal results of previous investigations have been tabulated by Blümner,[2] and yield the following average result (chiefly from analyses of vases from Southern Italy):—

Silicic acid	52 to 60 parts.
Clay earth	13 to 19 parts.
Chalk	5 to 10 parts.
Magnesia	1 to 3 parts.
Iron oxide	12 to 19 parts.

The largest proportion of clay found in any one vase was 27 parts; there was also one instance given of 24 parts of iron oxide.

The variations in tone of the clay of Greek vases are very

[1] *Traité*, i. p. 548. [2] *Technologie*, ii. p. 56.

marked. The usual colour is an ochre varying from yellowish-white to brownish-red, the mean being a sort of orange. These variations were apparently regulated by the amount of iron oxide employed. It has been noted by John [1] that vases were sometimes moulded "double," *i.e.* turned on the wheel in two different thicknesses of clay, the finer and ruddier forming the exterior surface for decoration.

The earliest and most primitive Greek vases (including those of the Mycenaean period) in most cases exhibit the natural quality of the clay, ranging from yellow to grey in colour; it is usually coarse and insufficiently baked, and protected by no lustrous glaze. In the early archaic vases, such as those of Melos, Athens, and Rhodes, we observe a pale yellow tone, which is apparently not a glaze, but inherent in the clay.[2] Thence-forward the clay becomes appreciably redder and warmer in tone until the lustrous glaze reaches its perfection in the Attic vases of the fifth century. In the later Italian fabrics again there is a great degeneration, the clay rapidly reverting to a paler hue, especially in the vases of Campania; while in the Etruscan imitations of the third century it is a dull coarse yellow, apparently due to a preponderance of lime. Generally speaking, it may be said that the colour depends on the proportion in which the constituent parts are mixed, a larger proportion of iron oxide producing a redder, a larger proportion of lime a paler hue.

The clay is permeable, allowing water to exude when not glazed, and when moistened emits a strong earthy smell. It is not known how this paste was prepared, for the Greeks have left few or no details of their processes, but it has been conjectured that the clay was fined by pouring it into a series of vats, and constantly decanting the water, so that the last vat held only the finest particles in suspension. The clay was worked up to the right consistency with the hands, and is supposed to have been ground in a mill or trodden out with the feet. Either red or white clay, or a mixture of the two, was preferred by the ancients, according to the nature of

[1] *Die Malerei*, p. 176.

[2] See Jahn, *Vasens. zu München*, p. cxliv; and Brunn-Lau, *Griech. Vasen*, p. 6.

the pottery required to be made, as we learn from an interesting passage in the *Geoponica*:—"All kinds of earth are not suited for pottery, but some prefer the reddish variety, others the white; others again blend the two . . . but the potter ought personally to assist in the operations and see that the clay is well levigated and not placed on the wheel until he has obtained a clear idea of the probable appearance of the jar after the baking" (vi. 3).

Certain sites enjoyed in antiquity great reputation for their clays. One of the most celebrated was that procured from a mine near the promontory of Cape Kolias,[1] close to Phaleron, from which was produced the paste which gave so much renown to the products of the Athenian Kerameikos. The vases made of it became so fashionable, that Plutarch[2] relates an anecdote of a person who, having swallowed poison, refused to drink the antidote except out of a vessel made of this clay. It seems to have been of a fine quality, but not remarkably warm in tone when submitted to the furnace; ruddle, or red ochre (*rubrica*), being employed to impart to it that rich deep orange glow which distinguishes the finest vases of the best period.[3] Corinth,[4] Knidos, Samos, and various other places famous for their potteries, were provided with fine clays. At Koptos, in Egypt, and in Rhodes, vases were manufactured of an aromatic earth.[5] The extreme lightness of the paste of these vases was remarked by the ancients, and its tenuity is mentioned by Plutarch.[6] That it was an object of ambition to excel in this respect, appears from the two amphorae mentioned by Pliny as preserved in the temple of Erythrae,[7] of extreme lightness and thinness, made by a potter and his pupil when contending which could produce the lightest vase. The thinnest vases which have come down to us are scarcely thicker than pieces of stout paper. Great difference is to be observed in the pastes of

[1] Suidas, *s.v.*; Athenaeus, xi. 482 B; Blümner, *Technol.* ii. p. 36.

[2] *De recta audiendi rat.* 9, § 42 D.

[3] Suidas, *s.v.* Κωλιάδος κεραμῆες; cf. Pliny, *H.N.* xxxv. 152.

[4] For representations of quarrying for clay at Corinth see the pinakes at Berlin, *Ant. Denkm.* i. pl. 8, Nos. 7, 23.

[5] Athen. xi. 464 B, C.

[6] *Reg. et Imp. Apophth.* 174 E.

[7] Pliny, *H.N.* xxxv. 161.

vases from widely-separated localities, due either to the composition or to the baking, as has been noted in the case of the terracottas (p. 113).

2. Manufacture of Vases

The earliest glazed vases were made with the hand, but the wheel was an invention of very remote antiquity, as has been noted in our Introductory Chapter. It is generally supposed that its origin is to be attributed to Egypt. Its introduction into Greece may easily be traced by a study of primitive pottery from any site such as Crete, Cyprus, or Troy, where the distinction between hand-made and wheel-made vessels is clear. Thus in the tombs of Cyprus which belong to the Bronze Age, the earlier finds, dating from about 2500—1500 B.C., are exclusively of hand-made pottery.[1] The latter part of the Bronze Age may be regarded as a transitional period, in which the tombs contain hand-made unglazed painted vases, together with pottery of a much more developed character, with a lustrous yellow glaze, bearing unmistakable evidence of having been turned on a wheel. This pottery appears to be largely imported, as opposed to the local wares, which are still hand-made, and its widespread distribution over the whole of the "Aegean" area marks an important epoch in the history of early ceramics (see Chapter VI.). It covers the period from 1500 to about 900 B.C., and it is to this time that we may attribute the general use of the potter's wheel in Greece, although it was known even earlier, as some isolated specimens prove.

Among the Greeks there were many contending claims for the honour of having invented the potter's wheel. Tradition attributed it to various personages, such as Daedalos,[2] or his nephew and rival Talos[3]; Hyperbios of Corinth[4]; Koroibos of Athens; and Anacharsis the Scythian.[5] Kritias, the comic poet, claimed the invention for Athens—"that city which . . . invented pottery, the famous offspring of the wheel, of earth,

[1] Myres in *Cyprus Mus. Cat.* p. 16.

[2] Diod. Sic. iv. 76.

[3] See Frazer, *Pausanias*, note to i. 21, 4.

[4] Pliny, *H.N.* vii. 198; Schol. *ad* Pind. *Ol.* xiii. 27.

[5] Diog. Laert. i. 105; Suidas, *s.v.* Ἀνάχαρσις.

and of fire." [1] There is also a familiar allusion to it in Homer,[2] which is a fair testimony to its antiquity :—

> "Full lightly, as when some potter sitteth and maketh assay
> Of the wheel to his hands well-fitted, to know if it runneth true."

As regards the traditions, even Strabo [3] realised their absurdity, when he asked, "How could the wheel be the invention of Anacharsis, when his predecessor Homer knew of it?" On the other hand, Poseidonios adheres to the tradition, maintaining that the passage in Homer is an interpolation.[4] Other allusions to the wheel are in the writings of Plato [5] and the comic poet Antiphanes.[6]

Among the Egyptians and Greeks the wheel took the form

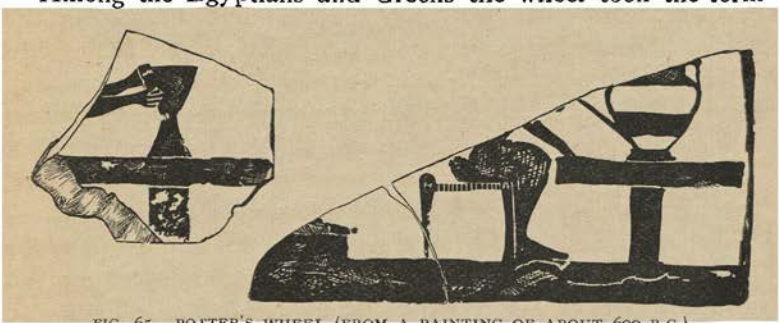


FIG. 65. POTTER'S WHEEL (FROM A PAINTING OF ABOUT 600 B.C.).

of a low circular table, turned with the hand, not as nowadays with the foot.[7] The assumption that the wheel was turned with the foot is only supported by one passage in the Book of Ecclesiasticus [8]; the evidence of Plutarch [9] and Hippokrates [10] tells decidedly against it. In 1840 some discs of terracotta, strengthened with spokes and a leaden tire, came to light on the site of the ancient potteries at Arezzo, and these had evidently been used as potter's wheels.[11] The process is also

[1] Athen. i. 28 C.
[2] *Il.* xviii. 600.
[3] vii. 303.
[4] Seneca, *Ep.* 90, 31.
[5] *Rep.* 420 E.
[6] *Apud* Athenaeum, x. 449 B.
[7] See Blümner, *Technologie*, ii. p. 38, note 3.
[8] xxxviii. 29 : *κεραμεὺς καθήμενος . . . καὶ συστρέφων ἐν ποσὶν αὐτοῦ τροχόν.*
[9] *De gen. Socr.* 20, p. 588 F.
[10] i. 645 K, quoted by Blümner.
[11] Blümner, ii. p. 39 ; Jahn in *Ber. d. sächs. Gesellsch.* 1854, p. 40, note. See also Chapters XXI.–XXII.

represented on two or three vases, as on a Corinthian painted tablet of about 600 B.C. (Fig. 65),[1] on a kylix in the British Museum (B 433), on a B.F. hydria in Munich (Fig. 67 *b*, below), and on a R.F. fragment from the Acropolis of Athens (Fig. 66),[2] which shows a man modelling the foot of a large krater, while a boy or slave turns the wheel, as on the Munich vase. On the British Museum cup the potter is seated on a low stool, apparently modelling a vase which he has just turned into shape on the wheel.

In making the vases the wheel was used in the following manner :—A piece of paste of the required size was placed upon it vertically in the centre, and while it revolved was formed with

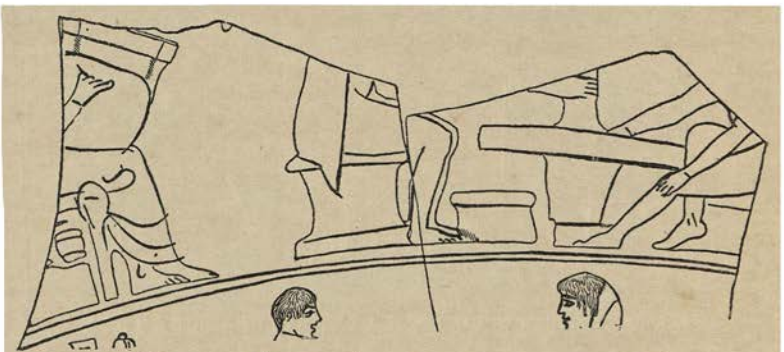


FIG. 66. POTTER'S WHEEL (FROM A VASE OF ABOUT 500 B.C.).

the finger and thumb, the potter paying regard not only to the production of the right shape, but to the necessary thickness of the walls. This process sufficed for the smaller pieces, such as cups or jugs; the larger amphorae and hydriae required the introduction of the arm. The feet, necks, mouths, and handles were separately turned on moulds, and fixed on while the clay was moist. They are often modelled with great beauty and precision, especially the feet, which are admirably finished off, to effect which the vase must have been inverted. The modelling and separate attachment of the handle is represented in more than one ancient work of art (see Fig. 66). In many

[1] *Ant. Denkm.* i. pl. 8, figs. 17, 18; cf. *Gaz. Arch.* 1880, p. 106.

[2] *Ath. Mitth.* xiv. (1889), p. 157.

cases the joining of the handles is so excellent that it is easier to break than to detach them. Great technical skill was displayed in turning certain peculiar forms of vases, and generally speaking the Greeks with their simple wheel effected wonders, producing shapes still unrivalled for beauty.

In the case of the earlier vases, which are made by hand, after the clay was properly kneaded the potter took up a mass of the paste, and hollowing it into the shape of walls with one hand, placed the other inside it and pressed it out into the required form. In this way also the thickness of the walls could be regulated. When raised or incised ornaments were required, he used modeller's tools, such as wooden or bronze chisels. The largest and coarsest vases of the Greeks were made with the hand, and the large *pithoi*, or casks, such as have been recently found in such numbers in Crete and Thera (p. 152), were modelled by the aid of a kind of hooped mould (*κάνναβος*: see *ibid.*). The smaller and finer vases, however, were invariably turned on the wheel. On a Graeco-Roman lamp from Pozzuoli, in the British Museum,[1] a potter is seen standing and modelling a vase before his furnace, in the manner no doubt employed at all periods.

Certain parts of the ancient painted vases were modelled by the potter from the earliest times—*e.g.* on those of the Geometrical period horses are occasionally found on the covers of the flat dishes moulded in full relief, and in other examples the handle is enriched with the moulded figure of a serpent twining round it. This kind of ornament is more suitable to works in metal than in clay, and suggests the idea that such vases were, in fact, imitations of metallic ones. On vases of all periods moulded bosses and heads, like the reliefs on metal vases, are sometimes found; even in black-figured vases the insertions of the handles of hydriae and oinochoae are occasionally thus enriched. In the later styles modelling was more profusely employed; small projecting heads were affixed to the handles of jugs[2] at their tops and bases, and on the large kraters found in Apulia the discs in which the handles terminated (see above, p. 171)

[1] Blümner, *Technologie*, ii. p. 51.

[2] As on the vases of Nikosthenes (see below, p. 385; B.M. B619, 620; Louvre F116, 117).

were ornamented with heads of the Gorgon Medusa, or with such subjects as Satyrs and Maenads. These portions were sometimes covered with the black varnish used for the body of the vase, but frequently they were painted with white and red colours of the opaque kind.

A peculiar kind of modelling was used for the gilded portions of reliefs, introduced over the black varnish. When the vase was baked a fine clay was applied to the parts intended for gilding and delicately modelled, either with a small tool or a brush, a process similar to that adopted in the Roman red ware (*en barbotine*, see Chapter XXI.). It may indeed have been squeezed in a fluid state through a tube upon the vase, and then modelled. As the gilded portions are generally small, this process was not difficult or important. A vase discovered at Cumae[1] has two friezes executed in this style, the upper round the neck, representing the Eleusinian deities, delicately modelled, coloured, and with the flesh completely gilded; the lower one consists of a band of animals and arabesque ornaments. Several vases from the same locality, from Capua and from the Cyrenaica, have wreaths of corn, ivy, or myrtle, and necklaces round the neck, modelled in the same style, while the rest is plain.

But the art of modelling was soon extensively superseded by that of *moulding*, or producing several impressions from a mould, generally itself of terracotta. The subject was in the first place modelled in relief with considerable care; and from this model a cast in clay was taken and then baked. The potter availed himself of moulds for various purposes. From them he produced entire parts of his vase in full relief, such as the handles, and possibly in some instances the feet. He also stamped out certain ornaments in relief, much in the same manner as the ornaments of cakes are prepared, and fixed them while moist to the still damp body of the vase. Such ornaments were principally placed upon the lips or at the base of the handles, and in the interior of the *kylikes* or cups of a late style. A late bowl of black glazed ware in the British Museum (see Plate XLVIII.) contains an impression from one of the later Syracusan decadrachms having for its subject the head

[1] Reinach, *Répertoire*, i. 11 = Petersburg 525.

of Persephone surrounded by dolphins: it was struck about 370 B.C. by Euainetos.[1]

The last method to be described is that of producing the entire vase from a mould by stamping it out, a process extensively adopted in Roman pottery. During the best period of the fictile art, while painting flourished, such vases were very rare; but on the introduction of a taste for magnificent vases of chased metal, the potters endeavoured to meet the public taste by imitating the reliefs of metal ware.

The most remarkable of these moulded vases are the *rhyta* or drinking-horns, the bodies of which terminate in the heads of animals, produced from a mould (see above, p. 192). By the same process were also made vases in the form of jugs or lekythi, the bodies of which are moulded in the shape of human heads, and sometimes glazed, while the necks were fashioned on the lathe, and the handles added. These were coloured and ornamented on the same principle as the rhyta, the vase-portion being generally covered with a black glaze, but sometimes with a white slip, after the manner of the terracottas. Besides the rhyta, *phialae*, or saucers, were also moulded; fine examples of which process may be seen on the flat bossed saucers, or *phialae mesomphaloi*, discussed in Chapter XI., p. 502.

Amphorae and other vases of late black ware, the bodies of which are reeded, were also evidently produced from moulds, and could not be made by the expensive process of modelling. Of smaller dimensions, but also made by moulding, were the vases known as *gutti*, or "lamp-feeders" (see above, p. 200). They have reeded bodies, long-necked mouths, and circular handles; and on their upper surface a small circular medallion in bas-relief, with a mythological subject. Such vases are principally found in Southern Italy and in Sicily, and belong to the second century B.C. (Chapter XI., p. 503). After being moulded they were entirely covered with a black glaze. Other vases again are entirely moulded in human or animal forms, with a small mouth or spout. These are found at all periods, but chiefly in the archaic Rhodian and Corinthian fabrics, and again reviving in the later stages of

[1] Evans, in *Num. Chron.* 3rd Ser. xi. p. 319 = *B.M. Cat.* iv. G 121, 122.

vase-fabrics in Southern Italy. Examples may be seen in the First Vase Room (Cases 33-34 and F) and Fourth Vase Room (Case B) of the British Museum: see also Plate XLVI. Others again retain the form of the jug or *lekythos*, with a figure or relief attached to the front of the body and coloured or covered with a white slip, while the back is varnished black. The whole subject is treated in fuller detail in Chapter XI.

Many vases of the fourth century and later are entirely covered with a coating of black glaze, while rows of small stamped ornaments, apparently made with a metal punch, have been impressed on the wet clay before the glaze was applied. These decorations are unimportant in their subjects, which are generally small Gorgons' heads, tendrils, or palmettes, and hatched bands, arranged round the axis of the vase. This latter ornament was probably produced by rolling the edge of a disc notched for the purpose round the vase, in the same manner as a bookbinder uses his brass punch. When these vases came into use the potter's trade had ceased to be artistic, and was essentially mechanical. They are found on almost all sites from Cyprus to Italy.[1]

After the vases had been made on the wheel they were duly dried in the sun[2] and lightly baked, after which they were ready for varnishing and painting; it is evident that they could not be painted while wet and soft. Moreover the glaze ran best on a surface already baked. It is also probable that the glaze was brought out by a process of polishing, the surface of the clay being smoothed by means of a small piece of wood or hard leather. At all events this seems the most satisfactory interpretation of a vase-painting in Berlin (Fig. 67*a*),[3] where a boy is seen applying a tool of some kind to the outer surface of a completed vase (*kotyle*); that the vase is not yet varnished is shown by its being left in a red colour, while two others, varnished black all over, stand on the steps of an oven close by, probably to dry after the application of the varnish.

[1] See for examples *B. M. Cat.* iv. G 87-95.

[2] Cf. Aesop, *Fab.* 166 *a*, *b*.

[3] *Cat.* 2542 = Blümner, *Technologie*, ii. p. 50.

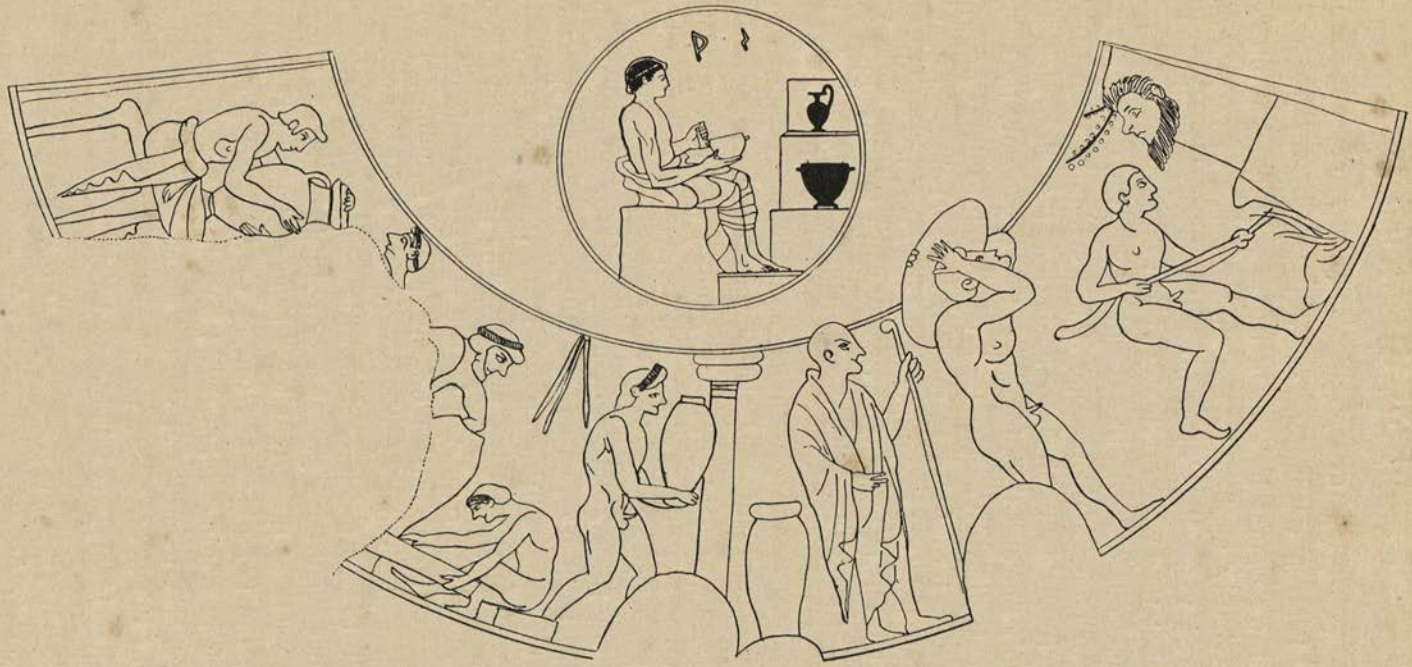


FIG. 67. (*a*) CUP IN BERLIN WITH BOY POLISHING VASE; (*b*) HYDRIA IN MUNICH: INTERIOR OF POTTERY.

Many vases, whether decorated with designs or not, are varnished black throughout the exterior, except the feet and lips, and we cannot be certain whether or not any glaze had been previously applied to the surface; but in respect of the red-figured vases, it is clear from the method employed (see p. 221) that they were originally glazed throughout.

This lustrous glaze is, like the black varnish, now quite a lost art. Seen under a microscope it has evidently been fused by baking; it yields neither to acids nor the blow-pipe. It is remarkably fine and thin, insomuch that it can only be analysed with great difficulty. No lead entered into its composition. It is however far inferior to modern glazes, being permeable by water; but it is not decomposed by the same chemical agents.[1] On the later R.F. vases it is of decidedly inferior quality, and often scales away, carrying the superimposed colours with it.

3. The Baking of Vases

The process of baking (*ὀπτᾶν*, *coquere*) was regarded as one of the most critical in the potter's art. It was not indeed universal, as Plato[2] distinguishes between vases which have or have not been exposed to the action of fire (*ἔμπυρα* and *ἄπυρα*), and Pliny[3] speaks of *fictile crudum* (*ὠμόν*) used for medicinal purposes. But all the vases that have come down to us have certainly been baked. The necessary amount of heat required was regulated by the character of the ware, and in the case of most Greek fabrics it appears to have been high. Many examples exist of discoloured vases which have been subjected to too much or too little heat, and in which the varnish has acquired a greenish or reddish hue. On the other hand, in some of those that have been subjected to subsequent burning, the red glaze has turned to an ashen-grey colour,[4] the black remaining unimpaired; but there are also instances of the varnish peeling off, the red colour alone preserving the outline of the figures.

Other accidents were liable to befall them in the baking,

[1] Brongniart, *Traité*, i. p. 552.
[2] *Legg.* iii. 679 A.
[3] *H.N.* xxix. 34.
[4] *E.g.* B.M. B 426, E 459.

such as the cracking of the vase under too great heat; this produced an effect expressed by the term πυρορραγής or φοξός, words which seem to have some reference to the *sound* of a cracked pot.[1] Or the shape of a vase might be damaged while it was yet soft, one knocking against another and denting its side, or crushing the lip through being carelessly superimposed. On a R.F. amphora in the British Museum (E 295) a dent has been caused by the pressure of another vase, which has left traces of a band of maeanders. This probably happened when the vases were in the kiln for the second firing. The quality of the baking was tested by tapping the walls of the vase.[2]

These misfortunes were attributed to the action of malicious demons, whose influence had to be counteracted in various ways; thus, for instance, a Satyric or grotesque head was placed in front of the furnace and was supposed to have an apotropaeic effect against the evil eye.[3] The pseudo-Homeric hymn addressed to the potters of Samos invokes the protection of Athena for the vases in the furnace, and mentions the evil spirits which are ready to injure them in the case of bad faith on the potter's part. Among the names given are: Ἄσβεστος, "the Unquenchable"; Σμάραγος, "the Crasher"; Σύντριψ, "the Smasher"; Ὠμόδαμος, "the Savage Conqueror."

The form of the oven probably differed little from those in use at the present day. No furnaces have been found in Greece, and our only evidence is derived from the painted vases; but they have been found at Ruvo[4] and elsewhere in Italy, and also in France, Germany, and England. Those of Roman date are indeed by no means uncommon, but are

[1] Cf. Ar. *Ach.* 933: φοφεῖ λάλον τι καὶ πυρορραγές. See also Suid. *s.v.* πυρορραγής; Pollux, vii. 164; *Etym. Magn.* p. 798, 17; and Schol. *in* Hom. *Il.* ii. 219. I cannot but think that in the term φοξός, as applied to Thersites' head, there is some correspondence to our phrase "crack-brained." Simonides (*apud* Athen. xi. 480 D) speaks of a φοξίχειλος Ἀργείη κύλιξ, a term of disputed meaning; but a cup of which the brim (χεῖλος) would suggest the shape of a peaked head is hardly conceivable; and here again there must surely be some notion of sound.

[2] See Blümner, *op. cit.* ii. p. 46.

[3] See Fig. 67 *b*; Berlin 2294; Furtwaengler, in *Jahrbuch*, vi. (1891), p. 110, points out that these heads probably represent the Kyklopes or demon-attendants of the fire-god Hephaistos. See above, p. 105, under πύραυνοι; also Daremberg and Saglio, *art.* Caminus.

[4] Lenormant, *La Grande Grèce*, i. p. 94.

discussed in fuller detail in the corresponding section of the work (Chapter XXI.).

As depicted on vases and elsewhere, the ancient furnaces seem to have been of simple construction, tall conical ovens fed by fires from beneath, into which the vases were placed with a long shovel resembling a baker's peel. The kilns were heated with charcoal or wood fuel, and in some of the representations of them we see men holding long instruments with which they are about to poke or rake the fires (Fig. 68). They had two doors, one for the insertion of the vases and one for the potter to watch the progress of the baking. For vases of great size, like the huge *πίθοι*, special ovens must have been necessary; and we have a representation on a Corinthian pinax[1] of such an oven, the roof of which resembles the upper part of a large *pithos* surrounded by flames.

On the lamp from Pozzuoli in the British Museum, referred to on p. 209, there is a curious subject in relief, representing a potter about to place a vase in an oven with a tall chimney; and on a hydria at Munich[2] (Fig. 67 *b*) a man is about to place an amphora in a kiln, while other jars (painted white) stand ready to be baked. But for our purposes the Corinthian pinakes are even more valuable for the information they afford. There are several representing the exterior of the conical furnace, with men standing by watching the fires and tending them with rakes[3];

FIG. 68. SEILENOS AS POTTER.

[1] Berlin 802 = *Ant. Denkm.* i. 8, 4.

[2] *Cat.* 731 = Jahn in *Ber. d. sächs. Gesellsch.* 1854, pl. 1, fig. 1, p. 27.

[3] A Seilenos in this act appears on a vase in *Sale Cat. Hôtel Drouot*, May 11th, 1903, No. 131 (reproduced in Fig. 68).

in another we have a bird's-eye view in horizontal section of the interior of an oven, filled with jugs of various forms (Fig. 69). Flames are usually indicated rising from underneath the ovens.[1]

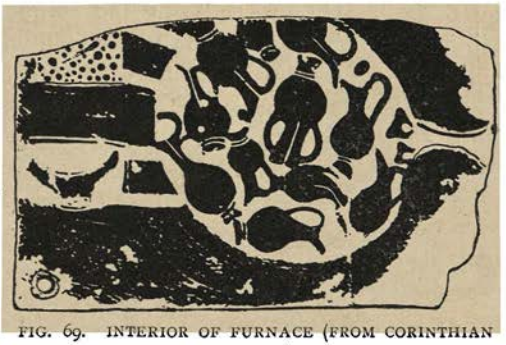


FIG. 69. INTERIOR OF FURNACE (FROM CORINTHIAN PINAX)

The Munich hydria (Fig. 67*b*) reproduces the interior of a potter's workshop with such detail that a full description of the scene may be permissible.[2] On the left of the picture a seated man seems to be examining an amphora, which has just been finished (it is painted black) and is brought up for his approval. Next is seen an amphora on the potter's wheel, painted white to indicate its imperfect state; one man places his arm inside to shape the interior, while another turns the wheel for him. On their right another white amphora is being carried out, just fresh from the wheel, but without handles or mouth, to be dried in the open or at the furnace; next is another standing on the ground to dry. On the right of the scene stands the foreman or master of the pottery, before whom a nude man carries what has been thought to be a sack of coals for the furnace, which is seen on the extreme right.

Even more vivid and instructive, in spite of its careless execution, is the painting on a kotyle found at Exarchos or Abae in Lokris, and now in the Athens Museum (Fig. 70).[3] The style is that of the imitation B.F. vases found in the temple of the Kabeiri at Thebes, late in the fifth century. We see represented the interior of a potter's workshop, in which the master of the business sits holding up a kylix in one hand,

[1] Examples are: *Ant. Denkm.* i. pl. 8, figs. 12, 19*b*, 22 (in Berlin); *Gaz. Arch.* 1880, pp. 105, 106 (in Louvre).

[2] A better drawing has recently been given in Furtwaengler and Reichhold, *Gr. Vasenm.* p. 159; but the reproduction in Fig. 67 is accurate in all essentials.

[3] *Cat.* 1114 = *Ath. Mitth.* xiv. (1889), p. 151.

while with the other he threatens a slave, who runs off with three kotylae ready for the furnace; three similar kotylae stand by the master's feet, and behind him are two more vases on a shelf. On the right of the scene a workman sits at a table on which is a pot full of paint, with a brush in it; he holds up a newly-painted kotyle, admiring his workmanship. The picture is completed by a realistic representation of an unfortunate slave suspended by cords to the ceiling as a

FIG. 70. INTERIOR OF POTTERY.

punishment for some offence, while another belabours him with a leather thong.

It would appear that the vases after the baking were often placed on the exterior of the furnace, either to prevent the too rapid cooling of the clay, or (as indicated on the Berlin cup) for the pigments to dry. Jahn and others have published a gem [1] on which a small two-handled vase is placed on the top of an oven, and a youth is applying two sticks to it, perhaps in order to take it down without injury by the contact of the hand. A companion gem,[2] on which an artist is painting a similar jar, shows a jug and a kylix standing on a kiln.

When the vases were returned from the furnace, the potter appears to have made good as far as possible the defects of those not absolutely spoiled; and if naturally or by accident any parts remained too pale after the baking, the defect was remedied by rubbing them over with a deep red ochre, which supplied the necessary tone.

[1] See Blümner, ii. p. 52.

[2] *Ibid.*

4. Painting

We may distinguish three principal classes of painted pottery, of which one at least admits of several subdivisions :—

(1) Primitive Greek vases, with simple painted ornaments, chiefly linear and geometrical, laid directly on the ground of the clay with the brush. The colour employed is usually a yellowish or brownish red, passing into black. The execution varies, but is often extremely coarse.

(2) Greek vases (and Italian imitations) painted with figures. These may be subdivided as follows :—

(*a*) Vases with figures in black varnish on red glazed ground (see Frontispiece, Vol. II.) ;

(*b*) Vases with figures left in the red glaze on a ground of black varnish (see Frontispiece, Vol. I.).

(3) (*a*) Vases of various dates with outline or polychrome decoration on white ground (see Plate XLIII.) ;

(*b*) Vases (also of various dates) with designs in opaque colour on black ground.

Of these, the second group is by far the largest and most important, and the complicated and technical processes which it involved will demand by far the greater share of our attention in the following account of the methods of painting. In both the classes (*a*) and (*b*) the colouring is almost confined to a contrasting of the red glazed ground of the clay with a black varnish-like pigment, a contrast which perhaps more than anything else furnishes the great charm of a Greek vase.

This black varnish is particularly lustrous and deep, but varies under different circumstances. Great difference of opinion has always existed as to its nature, and the method by which it was brought to such perfection by the Greeks. The variations in its appearance are due partly to differences of locality and fabric, partly to accidents of production. It is seen in its greatest perfection in the so-called Nolan amphorae of the severe red-figure period ; and at its worst in the Etruscan and Italiote imitations of Greek fabrics. On the vases found at Vulci it shows a tendency to assume a greenish hue, as opposed to the blue-black of the Nolan vases, while variations in the

direction of red, brown, and (on late South Italy fabrics) grey are of frequent occurrence. It is probable that these gradations of quality are mainly due to the action of fire, according as a higher or lower temperature was employed. On the other hand, the ashen-grey hue which vases of all periods sometimes assume[1] seems to be due to the direct action of fire in contact with them, and this may perhaps be explained by supposing that they had been burnt on a funeral pyre. This varnish also varies in the thickness with which it was laid on, as can be easily detected with the finger.

Although the chemical action of the earth sometimes causes the black varnish to disappear entirely, leaving only the figures faintly indicated on the red-clay ground, there has never yet been found any acid which has any effect upon it.[2] Various opinions have been promulgated, from Caylus downwards, as to the elements of which it is composed.[3] Brongniart[4] has analysed it with the following results :—

Silicic acid	46·30	50·00
Clay earth	11·90	
Iron oxide	16·70	17·00
Chalk	5·70	
Magnesia	2·30	
Soda	17·10	
Copper		traces.

It is unnecessary here to enter in detail into the numerous other theories of its composition, but so far it cannot be said that any certainty has been attained.

Turning now to the methods by which the black varnish was applied, we find it necessary to distinguish between the two classes of black-figured and red-figured vases; some vases, of course, are completely covered with it, having no painted design, but these do not enter into the question.

In the black-figured vases the figures are painted in black silhouette on the red ground of the vase, the outlines being first

[1] See above, p. 214.

[2] Blümner (ii. p. 75) gives an account of various chemical experiments made upon it.

[3] See Blümner, ii. p. 76 ff.

[4] *Traité*, i. p. 550.

roughly indicated by a pointed instrument making a faint line.[1] The surface within these outlines was then filled in with the black pigment by means of a brush, the details of anatomy, drapery, armour, etc., being subsequently brought out in part by further incising of lines with a pointed tool. In some of the finest vases, such as those of Amasis and Exekias (p. 381), the delicacy and minuteness of these lines is brought to an extraordinary pitch of perfection. After a second baking had taken place, the designs were further enriched by the application of opaque purple and white pigments, usually following certain conventional principles, the flesh of women and devices on shields, for instance, being always white, folds of drapery always purple. A third baking at a much lower heat was necessary to fix these colours, and the vase was then complete.

It should here be noted that there are really two subdivisions of these black-figured vases, which may be termed for convenience "red-bodied" and "black-bodied."[2] In the former the whole vase stands out in the natural red colour of the clay; whereas in the latter the treatment approaches more nearly to the red-figure method which we shall presently discuss. The whole body of the vase is in these examples covered with the black varnish, with the exception of a framed panel of red, on which the figures are painted. This distinction may be well observed in the Second Vase Room of the British Museum, where most of the vases on the east side of the room belong to the former or "red-bodied" class, while all those on the west side are "black-bodied," with designs in panels.

In the red-figured vases the black varnish is used as the background, and covers the whole vase, as in the "black-bodied" B.F. fabrics, the figures not being actually painted, but *left red* in the colour of the clay. The process was as follows:— Before the varnish was applied the outlines of the figures were indicated, not by incised lines but by drawing a thick line of black with a brush round their contours. It is probable that a fine brush was used at first, especially for more delicate work,

[1] This process is well illustrated on certain vases (*e.g.* B 158 in Brit. Mus.), where the artist has subsequently altered his design, and the lines still remain visible.

[2] See for a fuller consideration of this point p. 368.

and then a broader brush producing a line about an eighth of an inch in thickness. The process, be it noted, is more akin to *drawing* than painting; and it was as draughtsmen *par excellence* that the red-figure artists excelled. The next stage was to mark the inner details by means of very fine black lines (corresponding to the incised lines of B.F. vases), or by masses of black for surfaces such as the hair; white and purple were also employed, but far more sparingly than on the earlier vases. In the late Athenian and South Italian vases a tendency to polychromy sprang up, but the main process always remained the same to the final decadence of the art. The figures being completed and protected from accidents by their broad black borders, the varnishing of the whole exterior surface was then proceeded with. This was of course a purely mechanical business. A fragment of a red-figured vase in the Sèvres Museum forms an excellent illustration of the method employed, as, although the figures are finished, the ground has never been filled in, and the original black border is plainly visible (Fig. 71).

FIG. 71. FRAGMENT OF UNFINISHED RED-FIGURED VASE.

The result of the second baking was to fix the varnish and cause it to permeate the surface of the clay in such a way as to become practically inseparable from it. The subsidiary colours, on the other hand, which were laid on over the black, are always liable to disappear or fade.

A very interesting representation of painters at work on their vases is to be seen on a hydria from Ruvo (Fig. 72).[1] Three

[1] Baumeister, iii. p. 1992, fig. 2137 = Reinach, i. 336.

From *Blümner*.

FIG. 72. STUDIO OF VASE-PAINTER.

painters are seated at work with their brushes, of whom two are being crowned by Victories, while the third is about to receive a wreath from Athena, the protecting goddess of the industry. Their paint-pots are to be seen by their side. At one end of the scene a woman is similarly occupied.

In class 3 (*a*), or vases with figures on white ground, we have to deal with the process of covering the naturally pale clay with a white slip of more or less thick and creamy consistency, on which the designs were painted. In the archaic period this process is fairly common, especially in the earliest vases of Corinth and of Ionia, and at Kyrene and Naukratis. It was revived at Athens about the end of the sixth century (see pp. 385, 455). But when once the white slip was laid on, the technical process differed little from that in use on ordinary red-ground vases, except for the general avoidance of white as an accessory; it merely results that instead of a contrast of black and red, one of black and cream is obtained. The method was one also largely practised in early painting, as we see in the Corinthian pinakes and the sarcophagi of Clazomenae (pp. 316, 362).

But there is another class of white-ground vases to which we must devote more special attention, namely, those on which the figures are painted either in outline or with polychrome washes on the same white slip. The earliest instance of such a method is in the series of fragments found at Naukratis, dating from the beginning of the sixth century (see p. 348), which technically and artistically are of remarkably advanced character, and combine the two methods of painting in outline and in washes of colour. In the fifth century the practice was revived at Athens as a means of obtaining effective results with small vases, and became especially characteristic of one class, the funeral lekythi, which are elsewhere described (Chapter XI.). This, however, must serve as the most convenient place for a few remarks on their technique.

The vases, after they had left the wheel and were fitted with handle, etc., were covered with a coating of white flaky pigment, in consistency resembling liquid plaster of Paris, or, when dry, pipeclay. They received this coat of white while still on the

wheel, and then a second coating, of the usual black varnish, was applied to such parts as were not required for decoration. Usually the white covered the cylindrical part of the body, and the shoulder up to the neck; black was applied to the mouth, neck, handle, base of body, and stem. The clay, it should be noted, is of the ordinary kind, but two varieties have been distinguished, one of pale red, for light thin vases, the other of a blackish-grey, for thicker and heavier ware. The natural colour appears on the inside of the lip and foot. Before being removed from the wheel the vases were finely polished, which gave to the white coating a sort of lustrous sheen; they were then fired at a low temperature.

The method of decoration[1] was usually as follows:—A preliminary sketch was made with fine grey lines, ignoring draperies (hence the lines of figures are usually visible *through* the draperies), but not always necessarily followed when the colours were laid on. This was done as soon as the first lines were dry, the colour being applied with a fine brush and in monochrome—black, yellow, or red—following the lines of the sketch more or less closely. In the later examples red was used exclusively, and at all periods at Athens; but in the vases attributed to Locri and Sicily, a black turning to yellow is used. This combination of black and yellow is also used on the best Attic vases for various details, such as eyes and hair. The outlines also served to indicate the folds of the draperies. For the surfaces of drapery and other details, polychrome washes were employed, the colour being spread uniformly by means of a large brush. All varieties of red from rose to brown are found, also violet, light and brownish yellow, blue, black, and green. Hair is sometimes treated in outline, sometimes by means of washes. It is noteworthy that in the later examples the wash-colours were often painted right over the red lines. On the bodies of the figures these washes are rare, but in some cases shades of brown are used for flesh colour, as on the figure of Hypnos on a lekythos in the British Museum (D 58).

At Athens this polychrome decoration was not indeed limited to the lekythi, but was extended to the kylix, the pyxis, and

[1] See Pottier, *Lecythes blancs*, p. 99 ff.

other forms, of which some beautiful examples exist in the British Museum and at Athens.[1] In these, as in the best of the lekythi, the drawing of Greek artists seems almost to have reached perfection, and arouses our wonder yet more when we reflect that everything was done merely by freehand strokes of the brush. This technique is practically limited to the period 480—350 B.C.

The subsidiary ornamentation of the lekythi was put on either after the main design or before, this being immaterial. The lines above the design can be seen to have been painted on the wheel, as they go all round the vase; but the palmettes on the shoulder and maeander patterns above the design do not extend beyond it. After the colouring the vases appear to have been fired again, and in some cases the white slip was probably varnished. The details of their manufacture show that the lekythi were not intended for daily use; the shape is awkward for handling—the handles, for instance, are obviously not intended for practical use—and the delicate, lightly baked slip made them too porous for liquids. Everything tends in the direction of elegance and delicacy.

Our next sub-division consists of vases, chiefly of late date, in which the decoration is by means of opaque colours laid on the surface of a vase altogether coated with black varnish or glaze. The process is not indeed one absolutely unknown in earlier times, for there is the primitive Kamaraes ware of Crete (p. 266), and also a small series of archaic vases belonging to the early part of the fifth century (p. 393) in which this principle is adhered to, the designs being painted in opaque red or white on the black varnish. The latter seem to show a development from the black-figure period, to the end of which they belong, and may have been intended to rival the new red-figure method, but failed to attain popularity.

We next meet with the process in Southern Italy, where it again appears as the last effort of a worn-out fashion to flicker into life with renewed popularity. The centre of this revival, which follows on after the Apulian vases of the third century, was Gnatia (Fasano), on the coast of that district. The vases are

[1] See Chapter XI., and Hartwig, *Meisterschalen*, p. 499.

partly modelled in relief, or have ornaments in relief attached; the decoration, in white and purple, is confined to one side only, and is very feeble and limited in its scope. An apparently local variety, perhaps made in Campania by native craftsmen, has the figures in opaque red, with details marked by rudely incised lines.

The Gnatia style was adopted by the Romans in the second century for a small series of vases inscribed with names of Italian deities, such as Juno and Vesta (p. 490), and it appears in the method of decoration known as *en barbotine* on the pottery of the Empire (see Chapters XXI., XXIII.).

FIG. 73. VASE-PAINTER VARNISHING CUP ON WHEEL.

The instruments which were employed for the painting of the vases were not, as formerly supposed, limited to a metal or reed pen, and a camel's-hair brush. It has been recently pointed out in a most illuminating article by Dr. Hartwig[1] that the lines of black bordering the figures on red-figured vases are usually double, the space in between being filled in with varnish thus: ▯. Practical experiments have shown that this can be obtained with a *feather brush* or pen, drawing the lines separately, not concurrently, as might be done with a metal pen.[2] The feathers of the snipe were specially suitable for this purpose, as were also those of the swallow. It is probable that we see the use of the ordinary brush on the Ruvo vase-painting already mentioned, but this was no doubt used for filling in the ground and all parts where the colour was laid on in large masses. Again, on a fragment from the Athenian Acropolis (Fig. 73)[3] a man is seen covering the inside of a B.F.

[1] *Jahrbuch*, 1899, p. 147 ff.
[2] See *Ath. Mitth.* 1891, p. 376.
[3] *Jahrbuch*, 1899, p. 154.

kylix with black varnish while he turns it on the wheel; this is also done with an ordinary brush. But there is a R.F. kylix,[1] on the interior of which we see the undoubted use of the feather-brush or pen (Fig. 74). In his left hand the painter seems to hold the sharp tool for engraving the outlines of the figures, and with his right he manipulates the feather-pen

FIG. 74. VASE-PAINTER USING FEATHER-BRUSH.

which is seen to consist of a small feather inserted in a wooden holder.

It is not likely that this instrument was generally used before the introduction of the R.F. style; it would hardly have been required either for the silhouette figures of the B.F. vases or the outlines on the white ground. According to Hartwig, Andokides, one of the earliest R.F. artists (about 520 B.C.) was making experiments in the use of the feather-pen, and in the

[1] *Jahrbuch*, 1899, pl. 4.

course of twenty years, in the vases of Epiktetos and his school, its use had become general. It is not indeed unknown on B.F. vases, and can be traced in the ornamentation where fine lines were required, as on the Amasis vase in the Bibliothèque Nationale.[1] It was probably first used in the more developed Ionic pottery, but as we have seen had no chance of becoming generally used until the essentially linear R.F. style came into vogue. The artists who reached the height of skill in its use were Meidias and the painters of the delicate little vases of the latter half of the fifth century, this instrument being also admirably adapted for making the fine inner lines in which the painters of that period achieved such success.

Besides the painting-brush and the feather-pen, the other instruments used in the decoration of vases include the pointed graving-tools employed for incised lines, modelling-tools for the parts in relief, a stick for steadying the hand while at work, and a pair of compasses. The latter were employed for marking circles, as may be clearly seen on shields on the B.F. vases, where the mark left by the central point of the compasses is often visible.

The difficulties in the painting of Greek vases must have been numerous. In the first place, it was necessary for the artist to finish his sketch with great rapidity, since the clay rapidly absorbed the colouring matter, and the outlines were required to be bold and continuous, any joins producing a bad effect. Again, the vases were often painted while in an upright position, and the artist was obliged to stoop, rise, and execute his work in these difficult attitudes; nor could he remove the pencil from any figure which he had once begun. The eye must have been his only guide. Then, as he was obliged to draw his outline upon a damp surface, the black colour which he used was instantly confounded with the tint of the clay. The lines grew broad at first, and afterwards contracted themselves, leaving but a light trace, so that the artist could with difficulty discern what he had been doing. Moreover, the lines, once begun, could not be left off except where they met other lines which cut or terminated them. Thus, for example, the

[1] *Cat.* 222.

profile of a head must have been executed with a single continuous line, which could not be interrupted till it met the neck; and in drawing a thigh or leg, the whole outline must have been finished without taking off the pencil: proceeding from the top downwards, making use of the point to mark the horizontal lines, and afterwards rising upwards to finish the opposite side. The drawing was done entirely by the hand and no pattern used.

The outlines round the figures on R.F. vases were drawn strongly, in the manner described above, to prevent the background encroaching on the figure. That this was done while the clay was moist appears by the outlines uniting, which could not have taken place if the clay had been dry. It was so difficult to fill in the outlines without alteration, that they were frequently changed, and sometimes the ground was not reached, while at others it exceeded the line.

The ancient artists, notwithstanding these difficulties, observed all the laws of balance and proportion, especially *ἰσομετρία*, or the law of equal height of all figures; conveyed expression by means of attitude; and, by the use of profile, and the introduction of accessories, or small objects, into the background, contrived to compensate for the want of perspective.

This latter deficiency was due to the use of flat colours, which did not allow of shades, and the figures were consequently not seen in masses distinguished by light and shade, but isolated in the air. Hence, in order to make the figures distinct, and to express by attitude all the actions and sentiments required, the artist was compelled to use profile. The black colour, the choice of which may at first appear singular, is, after all, the most harmonious, and the best suited for showing the elegance and purity of the outline; whilst by its aptness to reveal any defects of shape, it compelled the artist to be very careful in his drawing.

The colours employed[1] were, as we have seen, remarkably few in number. Of the black varnish which plays such an important part, and of its composition we have already spoken. Of

[1] See Durand-Gréville in *Rev. Arch.* xviii. (1891), p. 99 ff., xix. (1892), p. 363 ff.

the opaque accessory colours, the white is said by Brongniart[1] to be a carbonate of lime or fine clay. It is evidently an earth of some kind, and gives no trace of lead under analysis. The creamy slip of the white-ground vases is of similar character, and appears to be a kind of pipeclay. It was probably of the same character as the earth of Melos used by Polygnotos.[2] The deep purple or crimson, so largely employed on the Corinthian and early Attic B.F. vases, is known to be an oxide of iron, an element which entered largely into the red glaze. The yellow found on the white vases and those of Apulia as an accessory to white is of an ochrous nature. The red used for outlines on the white lekythi is probably not vermilion (*minium*), but red ochre (μίλτος, *rubrica*). Blue and green, which are rarely found, and only on vases of the later styles, were produced from a basis of copper. On vases from the time of Euphronios and Brygos (about 480 B.C.) onwards, gilding was occasionally employed, the process being one which we have already described (see above, p. 210). Good instances of this process are to be seen in the fourth-century vases from Capua, which are glazed black throughout and ornamented solely with gilding.[3] But the gold leaf has often perished. Besides Capua, these vases are found chiefly in Athens and the Cyrenaica.

5. Status of Potters

It now remains to say something respecting the makers of Greek vases—the potters of antiquity. Unfortunately, however, little is known of their condition, except that they formed a guild, or fraternity, and that they amassed considerable fortunes by exporting their products to the principal emporia of the ancient world. The existence of two *Kerameikoi*, or pottery districts, at Athens shows the great commercial importance of the manufacture. In later times there seems to have been a considerable tendency to division of labour among the potters, and each

[1] See Blümner, *Technol.* ii. p. 81.

[2] See for the four colours used by him, Plut. *de defect. orac.* 47, 436 C; Cic. *Brut.* 18, 70; and cf. Pliny, *H.N.* xxxv. 50.

[3] On vases with gilding, see Jahn, *Vasen mit Goldschmuck* (1865).

man "specialised" in some particular shape; hence we find them characterised as χυτρεύς and χυτροπλάθος,[1] ληκυθοποιός,[2] καδοποιός,[3] or κωθωνοποιός.[4] It is assumed that the word ἐποίησεν, "made," when found on a vase, indicates the potter, and not the artist, although it is reasonable to suppose that when no artist's name accompanies the formula the potter was at the same time the painter. On one vase the names of two potters, Glaukytes and Archikles, are found[5]; one has been supposed to be the artist's, but it is more probable they were partners.

By the Athenians, potters were called *Prometheans*,[6] from the Titan Prometheus, who made man out of clay—which, according to one myth, was the blood of the Titans, or Giants—and was thus the founder of the fictile art. It was not, however, much esteemed, although without doubt the pursuit of it was a lucrative one, and many of the trade realised large fortunes; in proof of which may be cited the well-known anecdote of Agathokles,[7] who, at a time when the rich used plate, was in the habit of mixing earthenware with it at his table, telling his officers that he formerly made such ware, but that now, owing to his prudence and valour, he was served in gold—an anecdote which also suggests that the profession was not highly esteemed. The guild at Athens was called ἐκ κεραμέων, "of the potters,"[8] and we also hear of a college of κεραμεῖς at Thyateira.[9] However, the competition in the trade was so warm as to pass into a proverb, and the animosity of some of the rival potters is even recorded upon the vases.[10] To this spirit are also probably to be referred many of the tricks of the trade, such as imitations of the names of makers, and the numerous

[1] Plat. *Theaet.* 147 A, *Rep.* iv. 421 D; Pollux, vii. 163.

[2] Strabo, xv. 717; Pollux, vii. 182.

[3] Schol. *in* Ar. *Pac.* 1202.

[4] Pollux, vii. 160.

[5] B.M. B 400.

[6] Lucian, *Prom. in Verbis*, 2; cf. Lactantius, *Div. Inst.* ii. 11.

[7] Plutarch, *Apophth. Reg. et Imp.* 176 E.

[8] Cf. *B. M. Cat. of Sculpt.* i. 599; Ross-Meier, *Demen von Attika*, p. 122, No. 67. The persons here mentioned were not necessarily potters.

[9] Boeckh, *C.I.G.* ii. 3485.

[10] Hes. *Op. et Di.* 25: καὶ κεραμεὺς κεραμεῖ κοτέει; quoted by Aristotle, *Rhet.* ii. 4, 21, and Plat. *Lys.* 215 C. Euthymides on one of his vases places the boast, "Euphronios never did anything like this." See for these two artists, Chapter X.

illegible inscriptions. When the potter's establishment—called an *ergasterion*—was large, he employed under him a number of persons, some of whom were probably free but poor citizens, whilst others were slaves belonging to him.[1] How the labour was subdivided there are no means of accurately determining, but the following hands were probably employed:—(1) A potter, to make the vase on the wheel; (2) an artist, to trace with a point in outline the subject of the vase; (3) a painter, who executed the whole subject in outline, and who probably returned it to No. 2, when incised lines were required; (4) a modeller, who added such parts of the vase as were moulded; (5) a fireman, who took the vase to the furnace and brought it back; (6) a fireman for the furnace; (7) packers, to prepare the vases for exportation. Hence it may readily be conceived that a large establishment employed a considerable number of hands, and exhibited an animated scene of industrial activity.

[1] Cf. the vase at Athens described above (p. 218), and the others with representations of potteries.

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PART II

HISTORY OF GREEK VASE-PAINTING

CHAPTER VI

PRIMITIVE FABRICS

Introductory—Cypriote Bronze-Age pottery—Classification—Mycenaean pottery in Cyprus—Graeco-Phoenician fabrics—Shapes and decoration—Hellenic and later vases—Primitive pottery in Greece—Troy—Thera and Cyclades—Crete—Recent discoveries—Mycenaean pottery—Classification and distribution—Centres of fabric—Ethnography and chronology.

IN the preceding chapters we have given a general *résumé* of the subject of Greek pottery; we have discussed the sites on which Greek vases have been found, the methods employed in their manufacture, the shapes which they assume, and the uses to which they were put both on earth and in the tombs; and we have now reached perhaps the most important part of the subject, at any rate in the eyes of archaeologists, namely, the history of the rise, development and decadence of painting on Greek vases.

It has already been noted (in Chapter I.) that this branch of the study of Greek vases is one that has only been called into existence in comparatively recent times, and that up to the year 1854 or thereabouts all attempts at dating the vases (chiefly of course owing to the poverty of material) were purely empirical and tentative. They were moreover largely combined with fantastic interpretations of the painted designs.

During the last forty years, and especially during the last twenty, the steady growth of archaeological study and increased attention to excavations have enormously increased both the material at command and the power of utilising it with scientific method. The extensive finds of pottery in Greece, Asia Minor, Northern Africa, Italy, and elsewhere, including more especially products of the earlier periods, have enabled the students of the subject to trace the sequence of fabrics from the rude wares of Troy and the Greek Islands up to the graceful and finished products of the Athenian *ateliers*, and onward to the overgrown luxuriousness of the gigantic Apulian wares. The subjects of the paintings, once of all-absorbing, are now only of subordinate interest, except so far as they illustrate certain phases of development, and the chief interest of the vases is the question of their origin, their maker, or their place in relation to others.

It will therefore be the object of this and of the succeeding chapters to trace with all possible detail, as far as space permits, the history of Greek vase-manufacture and vase-painting in all their aspects. We have already indicated (p. 31) the limits within which the subject falls, and the convenient rough division into four main classes of which it permits (p. 23). This introductory chapter, therefore, deals with the primitive fabrics, leading up, through the two following, to the period of black-figured vases in Chapter IX. The lines of demarcation are, indeed, difficult if not impossible to draw, but they must not in any case be taken as rigid ones, being largely conventional, and only adopted in order to obtain a point of division for the chapters.

Perhaps the leading feature of the early history of Greek vases is the gradual coalescence of the numerous local fabrics first into two or three main streams, and finally into the one great and all-absorbing current of Athenian art. In the sixth century this was really brought about more by historical causes than anything else, as a result of the gradually increasing supremacy of Athens in art and culture from the time of the Peisistratidae down to that of Perikles.

One region, and one only, pursues its artistic course without

regard to the contemporaneous tendencies prevailing in the Greek world, and that is the island of **Cyprus.** Here again the causes are largely political, as we shall see; largely also ethnographical and geographical, from the character of the inhabitants and the position of the island, a meeting-place and bone of contention between the great nations of the Eastern Mediterranean. For this reason we propose to deal first with the pottery of Cyprus, which has little in common with that of the rest of Greece, and always retains something of its primitive character, though it is always as much influenced from Greece on the one hand as from the East on the other. It is in Cyprus also that we meet with some of the earliest remains of pottery yet found on Greek soil.

§ 1. CYPRIOTE POTTERY

BIBLIOGRAPHY

Cesnola, *Cyprus*; O.-Richter, *Kypros, the Bible, and Homer*; Perrot and Chipiez, *Hist. de l'Art*, iii. p. 648 ff.; *Cyprus Mus. Cat.* (Myres and O.-Richter); *B. M. Excavations in Cyprus* (Turner Bequest), 1894-6; Dümmler in *Ath. Mitth.* xi. (1886), p. 209 ff.; *Archaeologia*, xlv. p. 127 ff.; Pottier, *Cat. des Vases ant. du Louvre*, i. p. 82 ff., and other references there given.

In order to understand aright the history of Cypriote art, it is indeed necessary to know something of its ethnography and political history, and the various influences to which it has been subjected. But space forbids us to do more than make very brief allusions to the more important of these features. Speaking generally, Cyprus may be regarded as a centre wherein have met all the currents of ancient civilisation, forming an amalgamation of artistic elements. Thus Cypriote art, though it loses in originality, gains in interest; and yet though often slavishly imitative, it has at bottom great individuality, more especially in its pottery. Hence it will be seen that it is essentially necessary to consider the pottery of Cyprus as a thing apart.

As regards chronology, except for a certain determinable sequence of artistic phases, even more caution than in dealing with Hellenic art is required. The remarkable conservatism

and persistence of types exhibited by Cypriote art has more than once proved a pitfall, and has given rise to considerable controversy at one time or another. Dates can only be used in the vaguest manner.

The pottery of Cyprus falls under three headings, which for convenience, though not perhaps with the strictest accuracy, are usually defined as follows:—

1. *Bronze Age*, from about 2500 B.C. to 800 B.C.
2. *Graeco-Phoenician period*, from 800 B.C. to 400 B.C., overlapping with
3. *Hellenic period*, from 550 B.C. to 200 B.C., representing the time during which imported Greek vases are found in the tombs, native pottery gradually dying out except in the form of plain vessels.

The pottery of the Bronze-Age period again falls into two distinct periods: (1) Copper Age or pre-Mycenaean period (2500—1500 B.C.), during which few bronze implements are found in the tombs, and all the pottery is purely indigenous, the work of the original inhabitants of the island, without any admixture of importations. (2) The Mycenaean period (1500—800 B.C.), during which the local pottery (including both unpainted and painted vases) is reinforced by large quantities of imported Mycenaean pottery, together with elaborately decorated vases of Mycenaean technique, either made locally or specially made for Cyprus and imported.

The sites on which Bronze-Age remains are found (see above, p. 66) are chiefly confined to the central and southern parts of the island, the most important sites being near the modern towns of Nicosia, Larnaka, and Famagusta. The discovery in these tombs of such objects as milking-bowls and querns is an additional proof of the conclusion naturally to be drawn—that the early inhabitants of Cyprus were a race of pastoral lowlanders.[1] The tombs (see p. 35) are mostly pit-tombs of moderate depth, recalling in type the Egyptian *mastaba*, and burial is universal.

There is no doubt that the art of pottery was introduced into

[1] See *Cyprus Mus. Cat.* p. 14.

Cyprus coincidently with the beginning of the Copper Age, which may be placed at about the year 2000 B.C. Although no bronze is found in the earliest tombs, on the other hand stone implements are absent, and the types of the pottery are identical with those of the later Bronze Age. It will be seen that it presents throughout very striking parallels with the pottery of Hissarlik, which will form the subject of the next section. The forms are largely similar and the technique is the same, but the Hissarlik pottery is ruder and of inferior clay. Stone implements are found at Hissarlik, but no copper, from which the inference may be drawn that that metal, being indigenous to Cyprus, supplanted stone there at an earlier date than in the Troad, whither it had to find its way by means of commerce. It was no doubt largely due to the existence of its copper ores that Cyprus so early shows an advance in its civilisation.

The shapes of the earliest Cypriote pottery are purely indigenous and very characteristic, but the technique may very likely have been learned from elsewhere; in regard to which it should be noted that as it is invariably hand-made, an Egyptian origin is altogether precluded, owing to the early use of the wheel for pottery in that country (see pp. 7, 206). For the most part the forms are characterised by a tendency to fantastic and unsymmetrical modelling, with a preference for complicated forms, such as two or three vases joined together. Others again imitate gourds or vessels of straw and basket-work, such as are used in Cyprus at the present day. They have no foot or "base-ring" to stand upon; and another characteristic is the frequent absence of handles, the place of which is supplied by small ears, by means of which the vase was hung up or carried by cords.[1] Sometimes these ears cover the whole outline of the vase. The plastic principle is always popular in the Bronze-Age pottery, and manifests itself in more than one direction. From the first it is exhibited in the tendency, so common in early art, to combine the vase and the statuette,[2] a tendency which is even stronger in the pottery of Hissarlik. It also takes

[1] Cf. Perrot, *Hist. de l'Art*, iii. figs. 487-93.

[2] Cf. Perrot, *op. cit.* iii. figs. 498-503.

the form of designs in relief covering the surface of, or moulded to, the vase.

In one point Cyprus is manifestly in advance of the rest of the ancient world, and that is, in the decoration of the pottery. Here, in fact, we meet with the first attempts at painted vases, combined with the employment of a fine bright red or polished black slip to cover the surface. In the earlier varieties the designs, when they occur, are confined to simple rectilinear geometrical patterns incised through the slip before baking; but these are soon supplemented by the employment, first of a matt-white pigment, secondly of a brown-black paint obtained from the native umber. The only other locality in which painted vases occur at so early a period is the island of Thera (see below, p. 260).

We pass now to the consideration of the later Bronze-Age pottery—namely, that which is found in tombs together with vases of Mycenaean style. In this we see various modifications of the indigenous art, and witness its eventual transformation by the introduction of new processes and ideas from various sources. The main streams of influence are three in number, coming from the east, south, and west respectively. Of these the first represents the Asiatic civilisations of Babylonia and the Hittites, to whom in the first place are due the engraved cylinders frequently found in these tombs, and at a comparatively late date such objects as the ivory draught-box from Enkomi in the British Museum, which affords points of comparison with the reliefs of Kouyounjik. Egyptian influences date from the invasion of Cyprus by Thothmes III. (eighteenth dynasty), about 1450 B.C., as exemplified by the frequent occurrence of scarabs and porcelain objects. A counter-influence of Cyprus on Egypt is seen in the presence of exported Cypriote pottery in tombs at Kahun, Saqqâra, and elsewhere.[1] Lastly, there is the far more extensive influence of the Mycenaean civilisation, covering several hundred years, and eventually absorbing the indigenous fabrics until the foundations of a new phase of decorative art were laid on a combination of the two. The Mycenaean vases belong to the later styles exclusively

[1] See Hall, *Oldest Civilisation of Greece*, p. 72.

(see below, p. 271), and show a strong preference for certain forms such as the false-necked amphora and the large richly-decorated krater peculiar to Cyprus; but these we must discuss later in fuller detail. Briefly, they represent the first entry of Greece proper into the Cypriote world.

The ethnological affinities of the early inhabitants of Cyprus cannot be positively ascertained. In M. Heuzey's opinion they were Asiatics, Syrian rather than Phoenician, and he suggests that the names of Kition (Chittim) and Amathus (Hamath) imply Hittite and Hamathite colonists. Dümmler regarded them as closely akin to the race which inhabited the second city at Hissarlik,[1] an idea to which the similarity of the pottery might be thought to lend support. At all events in Greek legend this people was personified by the mythical king Kinyras, the father of Adonis, who came from the neighbouring Asiatic coast. The Hellenic, or rather Achaean, invasion is crystallised into the legends of Teucer's colonisation of Salamis after the fall of Troy,[2] of an Arcadian settlement at Kerynia and elsewhere, and of the founding of Curium by Argives (? Mycenaeans).[3]

The first attempt to classify the pottery of Cyprus, and to distinguish between the Bronze-Age wares and what are now known as the Graeco-Phoenician fabrics, was made by the late Mr. T. B. Sandwith in 1876.[4] Considering the comparative poverty of material at his command, and the state of archaeological knowledge at the time, his brief but illuminating monograph is a wonderfully accurate and scientific contribution, and, so far as it goes, his classification can still be accepted in the main. But the extensive series of excavations in the island since the British occupation, and the investigation of such fruitful sites as Salamis, Curium, and Kition, have resulted in a great advance of our knowledge of the subject. The elaborate classification made by Messrs. Myres and Ohnefalsch-Richter of the representative collections of

[1] See *Athen. Mitth.* xi. p. 249 ff., and Perrot, *Hist. de l'Art*, vi. p. 648. A fragment of late Bronze-Age Cypriote pottery was found at Hissarlik (Dörpfeld, *Troja und Ilion*, i. p. 286, fig. 182).

[2] See Meursius, *Cyprus*, i. chap. 20; Heuzey, *Cat. des Fig. ant. du Louvre*, p. 115.

[3] Strabo, xiv. 6, p. 683.

[4] *Archaeologia*, xlv. p. 127 ff.

the Cyprus Museum must for the present be regarded as final, and of necessity forms the basis of the succeeding description.

The pottery of the Bronze Age may be classified under two main headings: Painted and Unpainted Pottery. Of these the former is practically confined to the later tombs, and we naturally turn first to the unpainted pottery as taking precedence in chronology and development.

Almost the commonest, and probably the earliest, variety is the **red polished ware**, sometimes plain, but generally ornamented with incised patterns or reliefs (see Plate XI., Nos. 3, 4, 7).[1] The polished surface, which seems to betoken a great advance in technique, was doubtless produced by means of a burnisher. In some varieties the surface is black, a result due to the action of smoke in firing. The commonest forms are a globular bottle with long neck and handle, a plain bowl, a cooking-pot on feet, and a two-handled globular amphora; besides composite and abnormal forms. None of these vases have any kind of base except the cooking-pots.

The incised patterns, when they occur, are scratched in deeply before firing, and often filled in with white; the patterns, which tend to become more and more elaborate, consist of zigzags, wavy lines, chequers and lozenges, network patterns, and concentric circles. Ornament in relief is applied in the form of strips of clay, often worked into the shape of rude figures of trees, snakes, animals, or simple patterns. Many tombs and even cemeteries, as at Alambra, Agia Paraskevi, and elsewhere, contain no other form of pottery; but though these are undoubtedly earlier than the mixed tombs, the red ware in a degenerate form continues long afterwards.

There is also a small class of **black-slip ware**, covered with a thin dark lustreless slip which flakes off easily. The ornamentation, which is seldom absent, is generally in the form of a straight or wavy line with a row of dots alternately on

[1] Similar red polished wares were found in the New-Race tombs of Egypt (seventh to tenth dynasty), but in spite of the likeness it cannot be said that one is borrowed from the other (*Cyprus Mus. Cat.* p. 16).

either side, either incised or in relief. The forms are much the same as in the red ware, but often seem to suggest metal or leather prototypes.

An interesting class is formed by the **black punctured ware**, in which the clay is black throughout, without a slip, but partly polished. Most of these vases are small jugs with a narrow neck, swelling body, and small foot, and they are ornamented with punctured dots, usually in triangular patches, but sometimes irregularly distributed. In Cyprus they are mostly found in the early necropolis at Kalopsida, but they also occur in the late Mycenaean tombs at Enkomi. The special interest of this ware is that it is found in Egypt, under such circumstances that it can fairly be dated; notably at Khata'anah in conjunction with scarabs and flint chips of the twelfth and thirteenth dynasties (2500—2000 B.C.). It is also found in the Fayûm, where Prof. Petrie obtained some good specimens.[1]

Allied to this is the Cypriote *bucchero* ware, of plain black clay without slip, ornamented with ribs or flutings. It is only found in the later tombs, and can be traced through the subsequent transitional period.[2]

Of the remaining fabrics the most conspicuous is that termed by Mr. Myres the **base-ring ware**, which is marked off from other Bronze-Age types by its flat-ringed base in all cases. The clay is dark and of fine texture, with thinly-glazed surface. The ornament is either in relief or painted in matt-white, the patterns being exclusively of a basket or network type (Plate XI., figs. 1, 2). The reliefs, when they occur, consist of scrolls or raised seams curving over the body, obviously in imitation of the seams of a leather bottle; they sometimes end in a leaf-ornament,[3] and at other times take the form of a snake. This fabric is very commonly found in the later tombs with Mycenaean vases, and hardly earlier. It has been found in Egypt and at Lachish.[4]

Among the rarer varieties of unpainted wares Mr. Myres

[1] See Hall, *Oldest Greek Civilisation*, p. 69; *Journ. Hell. Stud.* xi. pl. 14; *Cyprus Mus. Cat.* p. 38.

[2] The resemblance to Italian bucchero ware is probably only accidental. See Chapter XVIII.

[3] *E.g.* A 66 in B.M.

[4] Hall, *Oldest Civilisation*, pp. 72, 98.

EARLY CYPRIOTE POTTERY (BRITISH MUSEUM).

1, 2, "BASE-RING" BLACK WARE; 3, 4, 7, INCISED RED AND BLACK WARES; 5, 6, "WHITE-SLIP" WARES.

includes white base-ring ware (plates and bowls), imitations of straw-plait or wicker-work, and plain *wheel-made wares* with red or black slip, of peculiar form.[1]

Among the Painted Pottery by far the most widely-spread local fabric is that styled by Mr. Myres the **white-slip ware,** which appears in the tombs of the later Bronze Age, and is more than any other associated with Mycenaean vases. In cemeteries such as Enkomi, Curium, and Maroni[2] it has been found in large quantities in almost every tomb, and its range is not limited to Cyprus. The characteristics of this ware are a black gritty clay, worked very thin, and a thick white creamy slip with which it is covered both inside and out; it is exceedingly brittle, and perfect specimens are comparatively uncommon. The ornament is laid on in a black pigment, often turning to red by the action of fire; the most common form is that of a hemispherical bowl with a flat triangular handle, notched at the apex. Almost the only other forms are a long-necked flask or bottle of the lekythos type and a large jug with cylindrical body (like an *olpe*) and a flat thumb-piece above the handle.

Mr. Myres[3] points out that the scheme of decoration seems intended to imitate the binding and seams of a leather bowl; it usually consists of a band of various patterns (lattice-work, zigzags, lozenges, or lines of dots) round the rim, from which similar bands descend vertically, but do not meet at the bottom. Similarly the handle seems intended to represent two pieces of flexible wood bound together. In the case of the jugs the patterns follow a similar principle, giving the effect of a decoration in panels to the upper part. Specimens of this ware are given in Plate XI., Nos. 5, 6.

Beyond the confines of Cyprus isolated specimens of this ware have been found at Athens, Hissarlik, Thera, Lachish in Palestine, and at Saqqara and Tell-el-Amarna in Egypt, in the last-named instance along with Mycenaean vases.[4] The resemblance of some white-slip wares to the Dipylon vases is not a little curious.[5] But it can hardly be thought that the one influenced the other.

[1] *E.g.* B.M. A 67-8.

[2] Cf. *Excavations in Cyprus*, pp. 34 ff., 72.

[3] *Cyprus Mus. Cat.* p. 39.

[4] Myres, *ibid.*

[5] Cf. for instance the jug given in Cesnola, *Cyprus*, p. 408, fig. 29.

The other local painted wares are by no means so common. They are, in fact, almost limited to specimens of an unpolished *white ware*, with fine cream-coloured clay, on which patterns such as groups of straight or wavy lines, chevrons, chequers, and triangles filled with hatched lines are painted with a pigment varying from dull black to dull red. The commonest forms are one-handled bowls and small bottles, either globular or sausage-shaped. The latter are distinguished by often having long tube-like spouts attached and by the numerous perforated projections for the attachment of strings, handles being generally absent at first, but when they are introduced the projections remain as an ornamental survival. In a few isolated specimens the surface is covered with a polished slip. Others again are covered with a *black glaze*,[1] on which are painted in dull red groups of short parallel lines, which (as Mr. Myres points out) seem to have been executed at a single stroke with a cluster of brushes.

The **Mycenaean pottery** which has been found on not a few sites in Cyprus, and of late years in such surprising quantities at Enkomi and in the neighbourhood of Larnaka and Limassol (Maroni, Curium, etc.), belongs properly to another section of this chapter, and would not call for discussion in this connection, but for the fact that in Cyprus it presents certain features which seem to be almost exclusively local. At all events it is advisable to consider how far Mycenaean pottery in Cyprus differs from that found in Rhodes, Crete, or Mycenae.

Two points claim our attention in the first instance: (1) that in point of technique the Cypriote finds fall absolutely into line with those in other parts of the Mycenaean world; (2) that the range of subjects depicted on the vases found in Cyprus is wider and in a measure more developed than elsewhere. To what extent we may be permitted, bearing both facts in mind, to predicate a local fabric of Mycenaean pottery in Cyprus, must for the present remain an open question; at the same time it seems extremely probable that the larger vases, which it will be necessary to discuss in detail, are, if not of local

[1] *E.g.* B.M. A 134: cf. *Cyprus Mus. Cat.* 401-2.

manufacture, at all events a fabric made specially for exportation to Cyprus, as we shall see was the case with a later variety of black-figured Attic ware.

The peculiarity of the Cypriote-Mycenaean pottery is that whereas on other sites the decoration is confined to linear ornaments, and animal or vegetable subjects drawn almost exclusively from the aquatic world (such as cuttle-fish, shell-fish, or seaweed), in Cyprus we find represented not only animals, such as bulls, deer, goats, and dogs, but even human figures, both male and female, and monsters such as Sphinxes and Gryphons. Having regard to what M. Pottier[1] calls the law of the *hierarchie des genres*, it does not seem impossible that this may imply a *late survival* of Mycenaean art in Cyprus, and although this view has been hitherto strongly contested in certain quarters, it finds support from other evidence obtained in recent excavations. The whole chronology of Cypriote pottery is still in a very unsettled state, and until it can be definitely shown that the Cypriote Geometrical style began concurrently with the appearance of Geometrical pottery in Greece, it is still admissible to urge that Mycenaean art prevailed here for some time subsequent to its disappearance from the greater part of the Hellenic world. For this the accepted date is the end of the tenth century B.C., but it is not necessary to extend its influence in Cyprus more than two centuries longer, *i.e.* beyond the eighth century, at the latest.

If we accept the view generally held that the Mycenaean civilisation was Achaean, and that after the Dorian invasion its representatives were driven in an easterly direction and settled on the coast of Asia Minor; and if again we regard this as an historical version of the Greek traditions of the Trojan war and the subsequent migrations of the Achaean heroes[2]; we may then consider that the stories of Teucer's foundation of a new Salamis and of an Argive colonisation of Curium find their verification in the Mycenaean settlements recently discovered on those two Cypriote sites. The extent

[1] *Cat. des Vases du Louvre*, i. p. 250: see below, pp. 284, 315.

[2] The Trojan legends were familiar in Cyprus, as the Κυπριακά of the local Cyclic poet Stasinos shows.

and richness of the old Salamis at Enkomi at any rate seems to suggest that it may have flourished as a Mycenaean settlement for some centuries.

But to return to the pottery. Two forms are eminently characteristic of the Cypriote varieties. Of these, one—the "false amphora" (p. 271)—is not peculiar to the island, but is found wherever Mycenaean pottery has penetrated; though especially common in Cyprus, it is in fact the most popular of all Mycenaean shapes. The other is a large krater, found in two varieties, either a straight-sided deep bowl with wide mouth and no neck, or a spheroidal vessel on a high stem, with a low straight neck of less diameter than the body. It is this latter class which appears to be of local manufacture and presents such a variety of painted decoration.

Up to the year 1895 only some half-dozen of these kraters were known, one of which was found by General Cesnola in the rich necropolis at Agia Paraskevi near Nicosia[1]; another he alleged to have come from Amathus, but it was no doubt found at Maroni, not so far distant, where for many years a Bronze-Age cemetery has been known. In the above-named year two more came to light at Curium,[2] one of the same type as General Cesnola's, with figures driving two-horse chariots; the other having in addition the unique subject of a series of women, each figure in a separate panel, represented as waving their arms or holding flowers.[3] These were speedily followed by the rich and valuable series from Enkomi now in the British Museum, since which time other interesting specimens have been obtained for the Museum in various excavations or have found their way into the hands of local collectors (see Plate XII.).

Native imitations of the Mycenaean vases, which have been described as "sub-Mycenaean wares," have been found in considerable numbers on most of the sites where the genuine Mycenaean ware exists. They fall technically under the heading of painted white ware (p. 251),[4] the difference being that

[1] Cf. Perrot, *Hist. de l'Art*, iii. pp. 714-15, figs. 525-26.

[2] *Excavations in Cyprus*, p. 73.

[3] Recent discoveries by Mr. Arthur Evans at Knossos (*Brit. Sch. Annual*, 1901-2, p. 15) seem to suggest that these panels may be meant for windows or storeys of houses. Cf. also the bronze from Enkomi (*Excavations*, p. 10).

[4] *Cyprus Mus. Cat.* p. 59.

MYCENAEAN VASES FROM CYPRUS (BRITISH MUSEUM).

the decoration is in *matt* colour (varying from black to red) on an unpolished drab ground. The patterns mostly follow Mycenaean models, but some are new. They are well represented on the Mycenaean site at Curium,[1] especially in one or two tombs of transitional character, and in some cases the decoration is of a distinctly Geometrical type, illustrating the development of the succeeding style. In any case it is not difficult to distinguish them from the genuine Mycenaean fabrics.

In these so-called sub-Mycenaean vases we can trace the best evidence of the transition from the Bronze Age to the succeeding or Graeco-Phoenician period. But on the whole the line of demarcation is clearly defined, as for instance by the forms and position of the tombs, which become larger and lie deeper; by the appearance of iron implements and bronze fibulae; and by the fact that all the native pottery is now made on the wheel. Relations with continental Greece are evidenced by the occasional importation of Geometrical pottery of the Dipylon type (as in the great vase found at Curium), dating from the ninth and eighth centuries B.C. As we have already seen, the first Hellenic settlements in Cyprus seem to have followed on more or less immediately after the Dorian invasion, in the sites of Salamis, Curium, Kerynia, Paphos, and others which afterwards became the capitals of small Hellenic kingdoms.

On the other hand, the Phoenician thalassocracy, which began about the ninth century B.C., never had much foothold in Cyprus, less at any rate than was formerly supposed. Politically at all events the Phoenician influence was comparatively small, even in their settlements at Kition and Amathus[2]; we read of expeditions of the kings of Tyre in the tenth and eighth centuries, the object of which was to force the former town to pay tribute; but subsequently they were compelled by the Assyrian domination under Sargon to retreat westwards. In the seventh century a new power arose in the shape of Egypt,

[1] *Excavations in Cyprus*, p. 74.

[2] See *Athen. Mitth.* xi. (1886), p. 248; cf. also Meursius, *Cyprus*, i. chap. 10; Heuzey, *Cat. des Fig. ant. du Louvre*, pp. 116-17.

and in the sixth Cyprus became a tributary of Amasis.[1] Throughout, however, relations with Greece were maintained, and we read that in 501 B.C. the Cypriote princes joined the Ionians in their revolt against Persia, a fact which shows the strength of the Hellenic element.

Nevertheless the term "Graeco-Phoenician," which has been adopted to describe the art of this period, is convenient, and can hardly be improved upon, if we bear in mind that the term "Phoenician" really represents the combination of Egyptian and Assyrian elements of art which filtered through that race into Cyprus, and in which sometimes the one, sometimes the other has the predominance. This is seen perhaps more clearly in the sculpture, metal-work, and terracottas, as for instance in the incised bronze and silver bowls,[2] than in the pottery. Painted pottery was never a feature of Oriental art, and the Phoenician influence in the pottery is confined to borrowed motives of Oriental character, like foreign words in a language. Another proof that Cyprus resisted the Phoenician domination is afforded by the curious fact that though the Greeks of the mainland adopted the Phoenician alphabet entirely, in Cyprus, on the other hand—where, above all, we should have expected to find it—its place is taken by a syllabary, the forms of which appear to bear some relation to the Lycian, Carian, and Pamphylian alphabets. That this syllabary, which is universally employed for inscriptions down to the fourth century, is of a very high antiquity is shown by its close affinities with the newly-discovered Cretan script, and by the fact that single characters of a similar type are often found engraved on the handles of Mycenaean vases in Cyprus. Each character represents a syllable, not a letter (except in the case of vowels), and the dialect is thought to be largely influenced by Aeolic.

Mycenaean influence, as might be expected, was slow to die out in Cyprus, and the pottery is no exception. It is seen

[1] Cypriote pottery with concentric circles has been found at Nebesheh in the Delta. It was brought by the Cypriote mercenaries, enrolled by Psammetichus, in the seventh century (*Eg. Expl. Fund*, 4th Mem. pl. 3, p. 20).

[2] Perrot, *Hist. de l'Art*, iii. p. 769 ff.

not only in the patterns, such as the concentric circles—an invention of the Cypriote-Mycenaean pottery, which forms a favourite and almost universal motive at a later date—but in the subjects and technique. The practice of painting figures in outline, not in silhouette, as in the birds and beasts of the Enkomi kraters, the use of dull red and black pigments on an unglazed light-coloured surface, and many other details are an heritage from the Bronze Age, extending over many a succeeding century. With these are combined the influences of the early Attic pottery,[1] in the panels of Geometrical patterns, and the later rosette and conventionalised lotos-flower, which, with the concentric circles, form the stock-in-trade of the "Graeco-Phoenician" potter. The British Museum collection includes one or two remarkable isolated specimens which illustrate this principle. It is for instance instructive to compare the Sphinxes on a krater from Enkomi[2] with those on a large amphora lately acquired from the Karpas,[3] or the oinochoe from General Cesnola's collection with a chariot-scene (Plate XIII.),[4] with those from Mycenaean sites similarly decorated. On the other hand, the extraordinary large vase from Tamassos,[5] with its crudely and childishly drawn figures, combines a curious admixture of Greek and Oriental motives, and early as it must be, is not Mycenaean in conception or technique.

Oriental influence is not, however, altogether wanting in the pottery. The lotos-flowers and rosettes, of which we have already spoken, are derived respectively from Egypt and Assyria, and the conventionalised palm-trees, which also appear, are of course purely Oriental. So too, again, the typically Oriental subject of the sacred tree between two animals appears in various forms. But here again we are met with the surprising fact that the Oriental element is far stronger in Greece than in Cyprus, as will be seen later in the account of the early Hellenic fabrics; and no doubt it is due to this cause that

[1] M. Pottier (*Louvre Cat.* i. p. 92) thinks that Greek influence may explain all the stages of Cypriote pottery from the Mycenaean period onwards. See also on this subject Dümmler, in *Ath. Mitth.* xi. p. 284.

[2] *Excavations in Cyprus*, p. 8, fig. 14.

[3] B.M. C 244.

[4] B.M. C 121 = Perrot, *Hist. de l'Art*, iii. pp. 716-17, figs. 527-8.

[5] B.M. C 120 = *Rev. Arch.* ix. (1887), p. 77 ff.

the Geometric style was not driven out from Cyprus as it was from Greece, but continued for many centuries.

In attempting a detailed description of the Graeco-Phoenician pottery, it will be seen that any chronological system is impossible. The conservative tendency of Cypriote art caused the same methods of decoration to be employed with extraordinary persistency during a period of time which saw the whole development of Hellenic vase-painting from its earliest beginnings to its decline, and though there is a certain amount of variety, there is no development properly speaking, and the latest fabrics are, artistically speaking, on the same level as the earliest. It might be thought that the evidence of excavations would compensate for this absence of artistic criteria; but such is not the case. As a general rule in tombs containing imported Greek vases, the dates of which can be fixed within reasonable limits, native pottery is conspicuous by its absence, as may be seen from the results obtained at Curium. In any case, in the tombs richest in Hellenic pottery, as at Poli, the local wares are largely of a definitely late character, and so far distinct from the Geometrical and Orientalising fabrics as to form a class by themselves. Another difficulty which has to be taken into account, is that caused by the frequency of re-burials in Cypriote tombs. Of this there were countless instances at Amathus and Poli, so much so that explorers of the latter site were actually led to believe that the Geometrical pottery was contemporaneous with remains of the Hellenistic age with which it was frequently found.[1] But where trustworthy evidence can be obtained, it entirely militates against this possibility.

The principal sites[2] on which "Graeco-Phoenician" pottery has been found are: Amathus, Curium, Dali (Idalion), Kition, Lapathos, Poli (Marion-Arsinoe), Paphos, Salamis, Soli, and Tamassos. Other sites are not at present identified, but the finds were made in the neighbourhood of the modern Achna, Ormidhia, and other villages, and in the Karpas. Of these sites the richest are Amathus, Dali, Curium, and Poli; but in the finest collection of vases of this class, that of General

[1] *Cyprus Mus. Cat.* p. 26. [2] *Ibid.* p. 21.

Cesnola at New York, the alleged sites are not always to be accepted with certainty.

Graeco-Phoenician pottery is, as has been said, exclusively wheel-made, and almost always supplied with a "base-ring." Reliefs and incised ornaments are never found, but instances of moulded wares, combining the vase with the statuette, are not wanting, especially among the later varieties. The designs are usually painted in a non-lustrous black pigment, varied with the use of opaque purple and white, corresponding to the pigments employed by Hellenic potters. The ground is either white, without any polish or slip—as in the painted white ware of the Bronze Age and sub-Mycenaean fabrics—or else covered with a more or less lustrous red slip, varying from a bright orange or deep red to a dark brown (the latter usually with unpolished surface). Purple is employed only on the white wares, white only on the red. The typical decoration of the white wares consists of lotos-patterns, tree-ornaments, and water-fowl. Generally speaking, these are earlier than the red. On the lustrous red wares the decoration is usually confined to simple patterns of concentric circles, vertical and horizontal, maeander crosses, lozenges and triangles. Fig. 75, from Curium, is a

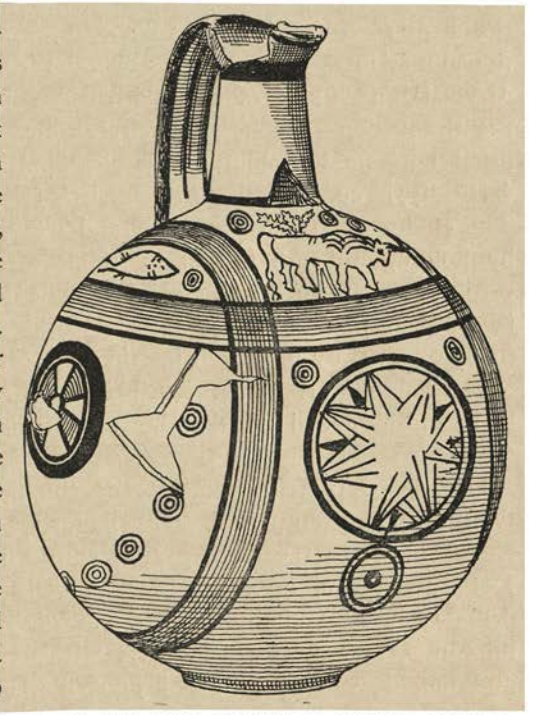


FIG. 75. JUG WITH CONCENTRIC CIRCLES: GRAECO-PHOENICIAN PERIOD (BRITISH MUSEUM).

typical specimen of the more elaborate types, and another is shown in Plate XIII.

The forms are at first very varied, but gradually crystallise into some half-dozen main types: dishes, bowls on stems, lekythi with one or two handles, jugs with globular bodies, and large amphorae with vertical side-handles. Of these the jug is by far the commonest. Among the peculiar forms in the earlier tombs (eighth to sixth centuries) may be mentioned *aski* in the form of birds or oxen (the latter a Mycenaean survival), and a kind of flask with barrel-shaped body, on which the decoration of concentric circles, etc., does not follow the usual horizontal system of classical pottery, but is disposed vertically, in contradiction to all artistic feeling (see Plate XIII.). The circles are often very fine and close, and were produced by holding a brush full of paint close to the surface of the vase as it was turned on the wheel. The drawing of the circles in different planes, without regard to the lines of the vase, was easily effected by placing it in different positions. In the period of Hellenic importations the principal form is the jug with ovoid body and modelled spout, and flat dishes are also common.

Unpainted pottery is almost as common as painted in the Graeco-Phoenician period, and calls for a few words of separate treatment. For the most part it comes under the heading of Domestic Ware, or earthenware vessels similar to those in ordinary use at the present day. They are made of plain, unrefined, usually reddish, clay, without any slip or polish, and include various forms of jugs, bowls, and plates, as well as the large wine-amphorae with pointed bases universally found at all periods. Many lamps and small "cup-and-saucer" double bowls occur in this category. In the earlier tombs of the Transitional period, pottery of a black-slip ware, with reeded body, is frequently found, chiefly in the form of jugs and kraters. Plain black wares, like the Italian *bucchero*, are also rarely found; as are vessels covered with a fine red slip and polished.

In most of the painted pottery of the Graeco-Phoenician period, especially in its earlier phases, the technical methods

CYPRIOTE POTTERY: GRAECO-PHOENICIAN PERIOD (BRITISH MUSEUM).

are those which we have already described in speaking not only of the "sub-Mycenaean" or Transitional fabrics, but also of the painted white ware of the Bronze-Age tombs. That is to say, that the decoration is in dull colour on a lustreless and (usually) unpolished white or drab ground. The colour, however, is usually not red, as in the earlier stages, but black, red being used chiefly as an accessory or for picked-out details. The latter varies from a pale brick-red to deep purple. The system of decoration is often extremely elaborate, although the range of subjects is limited. Apart from geometrical or conventional patterns, such as the stylised palmette, lotos-flower, stars, or trees, we only find water-fowl, fish, a few quadrupeds such as bulls or deer,[1] and finally human figures. But the last are exceedingly rare, and confined to the white wares, the best example being perhaps the very Oriental design of two warriors driving in a chariot,[2] or the worshippers rendering homage to seated deities on the fine vase from Ormidhia (Fig. 76).[3]

The system of geometrical decoration on some of the earlier vases, especially the large jars, is often extremely elaborate, covering every available inch of the surface[4]; the patterns consist of rosettes, panels of lozenge-pattern or chequers, triangles of hatched lines, dotted circles, etc., all combined in parallel bands or friezes, much in the same way as on the Dipylon wares. The disappearance of this elaborate style, together with human figures and figures of animals, is perhaps to be accounted for by the importations of Hellenic wares which began in the sixth century, and relegated the local fabrics to a subordinate position, just as in Greece the early Geometrical fabrics were obscured by the Mycenaean pottery (see below, p. 279).

Some interesting specimens, forming a late survival of these earlier Geometrical wares, were found at Amathus in 1894.[5]

[1] See Perrot, *Hist. de l'Art*, iii. figs. 510-13; *ibid.* figs. 520-23 (human figures); Cesnola, *Cyprus*, p. 55, pls. 44-6; *Excavations in Cyprus*, pp. 75, 104 ff.; *J.H.S.* v. p. 103.

[2] See above, p. 249. Cf. Layard, *Monuments of Nineveh*, pl. 10 = Nimroud Gallery of B.M., slab 4 *a*.

[3] Perrot, *op. cit.* iii. p. 711, fig. 523.

[4] *E.g.* Perrot, *op. cit.* iii. figs. 507, 523, pp. 699, 711; *Excavations in Cyprus*, pp. 104-5, figs. 151-52.

[5] *Excavations in Cyprus*, p. 105, fig. 152.

They include one which has a parallel in a vase found at Phocaea by Prof. Ramsay,[1] and originally thought to be Ionic in origin; the decoration consists of a head of Hathor the Egyptian goddess in a panel, with debased geometrical patterns. There can be no doubt now that the fabric is Cypriote, probably of the fifth century, and not without traces of Ionic influence.

From *Baumeister*.

FIG. 76. CYPRIOTE VASE FROM ORMIDHIA.

Another shows a remarkable development in the direction of naturalism, and the subject is unique in Cypriote pottery: men banqueting under a palm-tree.

These probably date from the fifth century, the period which seems to be represented by the later Geometrical red wares with concentric circles, now slowly dying out under the influence of

[1] B.M. C 268 = *J.H.S.* ii. p. 304.

Hellenic importations, and exceedingly rare in tombs where Greek vases are found. At the same time a great transformation comes over the contents of the tombs, which themselves begin to increase in size, with a shorter δρόμος, to which a flight of steps leads down. Other tombs—and this is often the case where Greek importations are found, as at Curium—are merely in the form of ramifying passages cut in the earth, without any structural remains. Sixth century and earlier Greek fabrics, such as the Geometrical, Corinthian, or Ionian wares, are very rare; but the imported Dipylon vase found by General Cesnola at Curium[1] is a notable instance. Black-figured vases when found are almost invariably of a late and careless type, characteristic of the last efforts of that style in the fifth century. There is, however, a remarkable exception in the case of a small class of jugs, which are in shape an exact imitation of the globular Cypriote jugs with concentric-circle decoration[2]; the long narrow neck and trefoil mouth, with its incised eyes, are retained, but the decoration is purely Attic, in the style of B.F. vases of 520—500 B.C. These are found at Poli and Amathus, and appear to have been made specially at Athens for importation to Cyprus. Poli (Marion) was for some reason a great centre for Athenian imports in general, and has yielded many fine specimens of Hellenic pottery (see p. 67). Red-figured vases signed by Chachrylion, Hermaios, etc., have been found here,[3] and at Curium a fine R.F. krater with the name of Megakles (καλός)[4]; also some fine white-ground specimens at Poli.[5]

By the fourth century, if not earlier, the Geometrical and Hellenic vases are almost entirely replaced by a new class of wares, which may be termed "Graeco-Cypriote," in contradistinction to the Graeco-Phoenician. The same red clay, covered with a more or less polished red slip, still obtains, but the painted decoration is confined to olive-wreaths in brown or plain bands of colour. We also witness the revival of

[1] *Cyprus*, pl. 29.

[2] See O.-Richter, *Kypros, the Bible, and Homer*, p. 497, and frontispiece to text volume; also *B.M. Excavations in Cyprus*, p. 105, fig. 152.

[3] B.M. E 34; *Branteghem Cat.* 30; Klein, *Meistersig.*[2] p. 221.

[4] Louvre A 258.

[5] *E.g. J.H.S.* xii. pl. 14; *Jahrbuch*, 1887, pl. 11.

an old practice, in a partial return to the taste for plastic decoration on vases. In many of the fourth-century tombs are found large pitchers, with a spout modelled in the form of a woman holding a jug, out of which the liquid was intended to pour (Plate XIII.).[1] These are sometimes richly decorated in polychrome, red, blue, green, black, pink, and white; but the colouring is apt to flake off and disappear. The imported wares of the fourth century are confined to plain cups and bowls of glazed black ware with stamped patterns, such as are often found in Greece and Italy. In the Hellenistic period (300—146 B.C.) painted vases are practically unknown, though a few rare specimens have turned up at Curium[2]; and it is not long before they are entirely replaced by the glass vessels and common wine-amphorae of the large and elaborate Roman tombs.

§ 2. PRIMITIVE POTTERY IN GREECE

BIBLIOGRAPHY

TROY: Schliemann, *Ilios*; Dörpfeld, *Troja 1893*, and *Troja und Ilion* (1902), i. p. 243 ff.; Dumont-Pottier, *Céramiques*, i. p. 3 ff.; Pottier, *Louvre Cat.* i. p. 74 ff.

THERA: Fouqué, *Santorin*; Dumont-Pottier, *Céramiques*, i. p. 19 ff.; Perrot, *Hist. de l'Art*, vi. p. 135 ff.; Furtwaengler and Loeschcke, *Myken. Vasen*, p. 18; Pottier, *Louvre Cat.* i. p. 119 ff.; Hiller von Gaertringen, *Thera*, vol. ii. (1903), p. 127 ff.; *Ath. Mitth.* xxviii. (1903), p. 1 ff.

MELOS: Excavations of British School at Phylakopi (*J.H.S.* Suppl. Vol. iv. 1904). See also Dümmler in *Ath. Mitth.* xi. (1886), p. 15 ff.

The earliest remains of pottery on Hellenic soil are to be sought chiefly in the Cyclades and on the site of ancient Troy. We have already had occasion to allude to the latter in speaking of the earliest Cypriote fabrics, and it is therefore fitting that we should now give it our first attention.

The site of **Troy**, now known as Hissarlik, was, as is well known, first explored by Dr. Schliemann in his laudable endeavours to prove the truth of the early Greek legends of the Trojan War. Although doubtless there are visible links between

[1] See Hermann, *Gräberfeld von Marion*, pp. 78, 109. p. 46 ff.; *B.M. Excavations in Cyprus*,

[2] *Excavations in Cyprus*, p. 78, Fig. 110.

the Homeric poems and the discoveries at Hissarlik, and although it is not necessary to deny all credence to the historical truth of the "Bible of the Greeks," yet it is now generally recognised that Dr. Schliemann's pardonable enthusiasm sometimes led him to hasty conclusions. For instance, Dr. Dörpfeld in his more recent investigations proved that if any remains are to be connected with the tale of Troy, it is those of the sixth, not of the second or burnt city.[1] Nine layers in all have been traced, of which the five lowest may be termed prehistoric, the third, fourth, and fifth being mere villages on the ruins of the first two. In the lowest and earliest of all, which may be roughly dated 3000—2500 B.C., flint implements were found, together with rude black pottery: hand-made utensils baked in the open, with rings for suspension in place of handles.

The second city belongs to the period 2500—2000 B.C., and it is this which has yielded pottery analogous to the earliest examples from Cyprus (p. 238). It is of the same rough hand-polished black ware, with decoration either of a plastic character or engraved in the clay while wet and filled in with white paint. Apart from this there are no traces of painted decoration, or of any slip; but the colour of the surface varies with the firing. The patterns consist of zigzags, circles, and other rudimentary geometrical ornaments. A few wheel-made specimens were found, but the majority are made by hand. What artistic sense was evinced by these primitive potters was shown exclusively in the forms, and in the tendency which is especially conspicuous in primitive times, though it lingered on through the history of Greek art, and again broke out in the period of the decadence, to combine the ceramic and the plastic idea, and to give to the vase the rude resemblance of the human form.[2] That this was no far-fetched idea is shown by the universal nomenclature which permits us to speak of the mouth, neck, shoulder, body, and foot of a vase—a principle which has been extended by general consent to countless inanimate objects. Thus we find the Hissarlik potter incising eyes on the upper

[1] *Troja 1893*, p. 86; *Troja u. Ilion*, i. p. 18. On the pottery generally see the latter, p. 243 ff.

[2] Its evolution is well illustrated by the Canopic vases described in Chapter XVIII.

part of the vase, or affixing lumps of clay to give a rude suggestion of ears, nose or breasts, or bands to denote necklaces. The handles often seem intended for rudimentary arms, and we are tempted to see in the hat-shaped covers of the vases the idea of a head-covering. Schliemann even went so far as to regard them as actual idols, and was led by the superficial resemblance of some to the form of an owl into identifying them with figures of the "owl-eyed" (γλαυκῶπις) Pallas Athena (cf. Fig. 77). But this interpretation has not found favour for many reasons, and the accidental combination of forms is obviously only an artistic phase. There are also many similar shapes, such as plain jars and jugs, and deep funnel-shaped cups with two graceful handles.

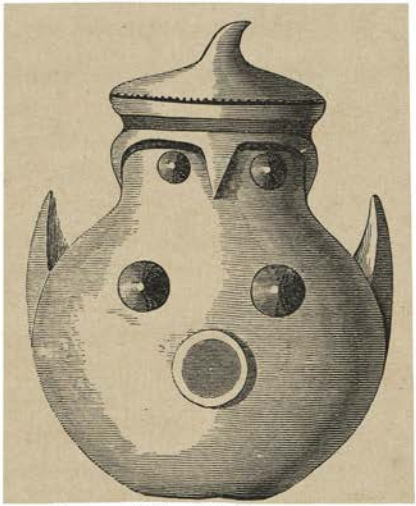


FIG. 77. "OWL-VASE" FROM TROY.

M. Dumont[1] classifies the fabrics as follows: (1) ordinary vessels, plates, etc.; (2) large jars or amphorae; (3) primitive kraters, deep cups, etc.; (4) spherical vases with base-ring [?] and long neck[2]; (5) long two-handled cups; (6) vases reproducing the human form; (7) vases in the form of pigs and other animals; (8) exceptional forms, such as double vases; (9) vases with incised patterns, on one of which a Sphinx is engraved. Figs. 78-80 give examples of classes (5), (7), and (8); Fig. 77 a specimen of class (6).[3]

The Hissarlik pottery may be regarded as a local development, partly parallel with that of Cyprus,[4] partly derivative

[1] *Céramiques*, i. p. 6: see for examples *ibid.* pp. 7, 11.

[2] A jug with beak-shaped mouth, called by the Germans a *Schnabelkanne*. The base-ring to which he alludes is not apparent. Cf. for the type Fig. 81 below, from Thera.

[3] See Schliemann, *Ilios*, pp. 340, 372, 375, 384.

[4] Cf. *Cyprus Mus. Cat.* p. 18.

therefrom; of Oriental influence there are no traces, but the connection with Thera and Cyprus is indisputable.

FIG. 78. FUNNEL-VASE FROM TROY.

Passing over the unimportant traces of the three succeeding settlements, we find in the sixth city a great advance. The plastic forms disappear, and generally speaking the shapes become more classical. Besides plain pottery with matt-black polished surface we meet with painted vases with curvilinear and vegetable patterns. The remains of genuine Mycenaean pottery, the fortifications and buildings, with great halls in the style of Mycenae and Tiryns, bear out Dr. Dörpfeld's contention that this is the Troy of Homer. Two points among the pottery finds of this period are worth noting; firstly that they included a fragment of Cypriote "white-slip" ware, secondly that Geometrical patterns mingle with the Mycenaean in the upper layers.

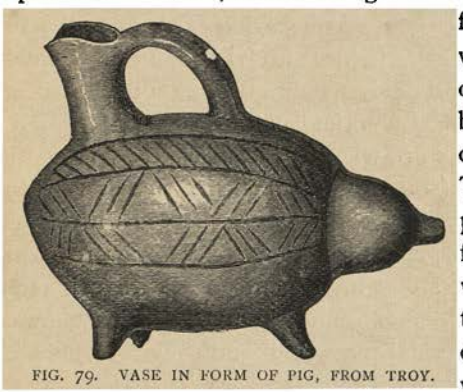


FIG. 79. VASE IN FORM OF PIG, FROM TROY.

The three remaining layers cover respectively the archaic period, the developed Hellenic and Hellenistic periods, and the age in which the city of Ilium was refounded by the Romans. Dr. Dörpfeld found some interesting local fabrics dating from the fifth century, examples of which had previously been obtained by Mr. Calvert for the British Museum.[1]

FIG. 80. VASE WITH TWO NECKS (TROY).

Of almost equal antiquity with the remains at Hissarlik is some of the pottery discovered in the Cyclades,

[1] *Troja 1893*, p. 118; *Troja und Ilion*, i. p. 310; B.M. B 83 ff.; and see p. 339.

and especially at **Thera**. Here, indeed, we meet with the earliest known examples of Greek *painted* pottery (Crete excepted), and that, as we shall see, of a remarkably developed type.

The island of Thera may be described as a sort of prehistoric Pompeii buried under volcanic deposits, which have completely transformed the configuration of the island. The results of preliminary excavations by the French in 1866 showed that the cataclysm which overwhelmed the island must (on geological grounds) have taken place about the twentieth century B.C., and that the remains of pottery must be anterior to this event.[1] Herodotos[2] states that Kadmos founded a settlement in the fourteenth century, and the Minyae again about the twelfth, and the island must have been uninhabitable for a long time previously.

The houses and other remains of civilisation discovered below the volcanic deposits show an advance on Hissarlik (second city) and the earliest Cypriote culture, and the pottery is no exception. The vases are wheel-made, fired at a moderate heat in closed furnaces (sometimes baked in the sun), and plastic forms are almost wanting.[3] Many are pierced with holes in the bottom, for what purpose is not known. They were often found *in situ*, mixed with stone implements, and with evidence of having contained grain. The forms are very regular, a cylindrical shape being specially affected, and they are made of a badly levigated clay, covered with a greyish slip, on which the patterns are laid in *matt* colours—white, black, or red—without any incised markings.

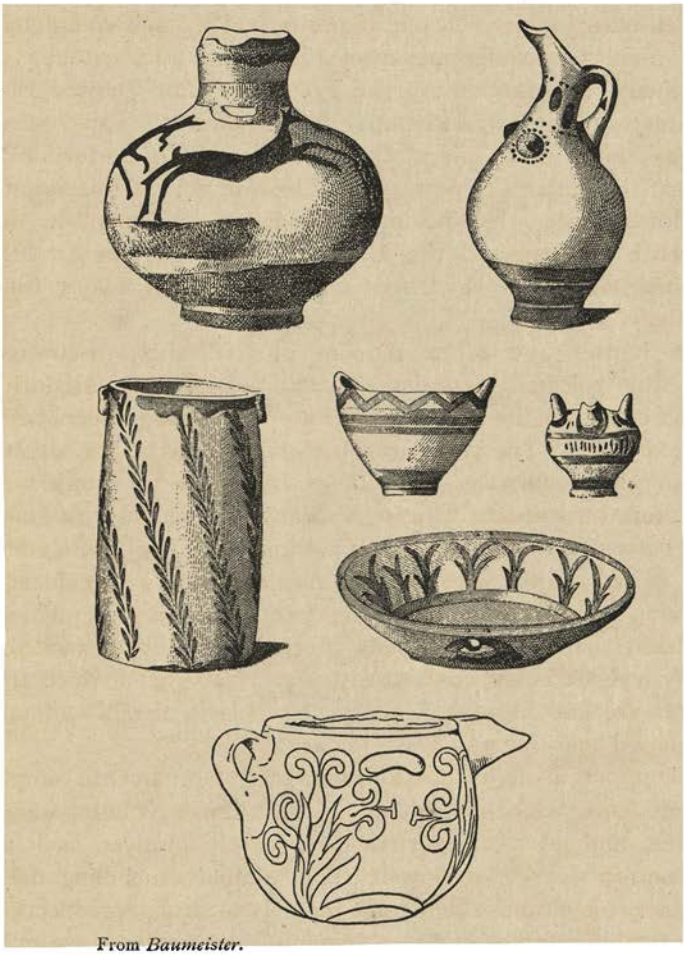
M. Dumont distinguishes four varieties of ornament: simple patterns, such as bands, hatchings, and dots; volutes, wave-patterns, and intersecting circles; vegetable motives, such as long narrow leaves or flowers; and animals, including deer, and ducks or swans. Generally there is a strong predilection for vegetable motives, and in this naturalistic tendency we may see the prelude to the Mycenaean period. Among those now at the French School at Athens, which has the best collection,

[1] See Fouqué, *Santorin, passim*; Dumont-Pottier, i. p. 28; Hiller von Gaertringen, *Thera*, i. p. 36 ff.

[2] iv. 147-48.

[3] One is given by Dumont-Pottier, pl. 2, fig. 13.

are several interesting examples illustrated in Fig. 81.[1] One is a trefoil-mouthed jug with running quadrupeds in black, and red bands, on a grey ground; another jug is painted with



From *Baumeister*.

FIG. 81. VASES FROM THERA.

birds in black, the details in red and white. A sort of cream-jug is decorated with water-plant patterns; a cylindrical jar with oblique wreaths; and a dish with seaweed. A funnel-shaped

[1] See Dumont-Pottier, p. 21, figs. 32-3, pls. 1, 2.

vase and a beak-mouthed jug are obvious prototypes of Mycenaean forms.

The chief differences from the Hissarlik vases are in the forms and methods of decoration, but resemblances may be noted in the long narrow necks, and the rings for suspension, as in the plastic forms when they do occur. That the fabric is a local one hardly admits of doubt, but it is interesting to note the occurrence of a bowl of white-slip ware from Cyprus in Thera,[1] and conversely the appearance of a vase of Thera fabric at Mycenae.[2] Thus we have evidence of extensive commercial relations. Some tombs of the Hellenic period seem to have been dug right down into the volcanic deposit, for they contained pottery with Geometrical decoration.[3]

The discovery of primitive stone idols in Thera shows that it belonged to the Cycladic civilisation, which extended from 2500 to 1600 B.C., filling up the gap between Hissarlik and Mycenae. It has been suggested that these Cycladic peoples were Carians,[4] subsequently driven to the Asiatic mainland by Minos, who typifies the rising power of Crete and the Mycenaean world.[5] This Cycladic civilisation is also exemplified in the earliest finds from other islands, such as Amorgos, Syra, Paros, and Antiparos, and in other instances noted early in the century by the observant traveller Ross.[6] The pottery from these sites is, however, less advanced than that of Thera, but varies in character. Painted patterns were found on vases from Amorgos and Syra, the latter in the form of brown foliage on yellow ground.

It would not be right to conclude this section without some notice of the remarkably interesting pottery excavated at Phylakopi in **Melos** by the British School in 1896-99, which is important as forming a connecting link between the Cycladic wares and the fully-developed Mycenaean style. Space forbids

[1] Furtwaengler and Loeschcke, *Myken. Vasen*, pl. 12, No. 80.

[2] Fouqué, *op. cit.* p. 127, note.

[3] On the later pottery from Thera see generally Hiller von Gaertringen, *Thera*, ii. p. 127 ff.; *Ath. Mitth.* 1903, p. 1 ff.

[4] Dümmler (*Ath. Mitth.* 1886, p. 45) calls them "Leleges"; but he places Minos in the Geometrical period.

[5] Cf. Hdt. i. 171, and Thuc. i. 4-8.

[6] *Ath. Mitth.* 1886, p. 15; Ross, *Reisen durch die Inseln, passim*; Athens Mus. Nos. 23-9, 136, 142-43; *J.H.S.* v. p. 53 ff.

more than a brief abstract of the results obtained, which have just been given to the world in an admirable publication.[1] Mr. C. C. Edgar, to whom the task of studying the pottery was allotted, distinguishes four main groups:

1. (*a*) Primitive pottery of the cist-tomb type, corresponding to that of Hissarlik; (*b*) more advanced ware of the same kind.
2. Painted Geometrical wares.
3. Local pottery in Mycenaean style with spiral and naturalistic designs, falling into two divisions, earlier and later.
4. Imported Mycenaean pottery of the third and fourth styles (see below, p. 271).

Generally speaking the pottery is of local make, and Phylakopi seems to have been an important centre in the early Mycenaean period, having considerable intercourse with Crete. The earliest wares (class 1) include plain pottery, hand-made, with burnished brown surface or simple incised patterns; those of class 2 are painted in lustrous or matt black on a white slip, or in white on lustrous black or red, with simple patterns; they appear to be hand-made. The Mycenaean pottery is more or less akin to that found elsewhere in the Aegean.

§ 3. CRETE

BIBLIOGRAPHY

Dumont-Pottier, i. p. 64 (finds in 1878 at Knossos); Milchhoefer, *Anfänge der Kunst*; Furtwaengler and Loeschcke, *Myken. Vasen*, p. 22; Pottier, *Louvre Cat.* i. p. 173; *Mon. Antichi*, vi. p. 333 ff.; *J.H.S.* xxi. p. 78 ff., xxiii. p. 157 ff.; *British School Annual*, vi. p. 85 ff., vii. p. 51, and ix. p. 297 ff.; *Proc. Soc. Antiqs.* xv. (1894), p. 351 ff.

In turning our attention next to the island of Crete, we are confronted with a new element in Greek archaeology; namely, the results of the recent discoveries, which as yet have hardly become material ripe for use in a general handbook. On the other hand, their singular importance deserves full recognition. It must, therefore, be borne in mind that much in the succeeding section is merely the embodiment of previous

[1] *J.H.S. Suppl. Papers*, vol. iv. (1904).

researches, and that the new evidence can only be briefly summarised.

Allusion has just been made to the thalassocracy of Minos and its bearing on the history of early Greek civilisations, and the recent discoveries have done much to show that the prince who built the great palace at Knossos in the early days of Mycenaean civilisation, if he is not actually the Minos of Greek legend, yet represents the rising power which extended its dominion over the Aegean and drove the Carian people to the mainland. This supremacy of Crete from the fifteenth to the eleventh century was artistic as well as political. The Crete of Minos was, moreover, the point of contact between the Aegean peoples and the Oriental races; and in the story of the Minotaur we may perhaps see a reflection of the human sacrifices offered to the Phoenician Moloch or Melkarth. The familiar passage in Homer[1] which deals with the ethnography of Crete speaks of four component elements, which may be explained as (1) the Eteokretes, or aborigines of the island, to whom the early civilisation exemplified in their ceramic and glyptic products is mainly due; (2) the Kydonii or Leleges, brought by Minos from the islands[2]; (3) the Achaeans or mainland Greeks of the period of the Trojan War; (4) the Dorians, whose connection with the island dates from the eleventh century onwards.

Even before the recent excavations pottery had been found in Crete which dated from the dawn of the Mycenaean period, and from the island's early connection with Egypt was thought to be contemporaneous with that of Hissarlik and Thera. From the circumstances of its first appearance in any quantity at Kamaraes, in the plain of Ida, it has usually been named after that place. Dr. Orsi discovered two fragments of Hissarlik type at Phaestos,[3] also a vase of island type, one of Thera type,[4] and some early Cypriote wares.[5] Large numbers of fragments of this ware in the Museum at Candia were first noted by Dr. Orsi

[1] *Od.* xix. 172 ff.

[2] Hdt. i. 171.

[3] *Mon. Antichi*, vi. p. 342, pl. 12, figs. 50, 52.

[4] *Ibid.* pl. 11, figs. 44-5.

[5] *Ibid.* pl. 10, fig. 23; pl. 12, figs. 57, 59.

and Mr. J. L. Myres about 1894.[1] The extensive discoveries made by Messrs. Hogarth and Welch for the British School at Athens in 1899—1900 (see p. 60) have added still further to our knowledge of the ware; and these, taken in conjunction with Mr. Arthur Evans's extensive finds at Knossos (1899—1902), have enabled a recent writer to draw up a tentative classification of all the prehistoric pottery of Crete.[2]

In his paper Mr. Mackenzie divides the pottery into three main classes, which he distinguishes as Neolithic, Early and Middle Minoan, and Late Minoan. The first-named extends down to about 3000 B.C.; the second covers the period 3000—2000 B.C; and the third (including Mycenaean pottery of the usual types) lasts down to 1500 B.C., about which time the Cretan supremacy came to an end, and the Mycenaean centre of gravity was shifted to the mainland of Greece.

(1) Pottery of the Neolithic period is quite exceptional in Aegean localities; yet the evidence from the excavations is so unmistakable that there can be no question of its great antiquity. It consists of common household vessels of grey clay, hand-made and burnished; at first devoid of decoration, but subsequently fragments appear with incised patterns filled in with white. These, it may be noted, may help to date the analogous wares from Troy and Egypt. The black surface becomes more and more lustrous, and in some cases a sort of rippling effect is produced in the soft clay with a blunt instrument[3]; finally an age of decline manifests itself, but at the same time an advance is made from filling in hollows with white to painting in colours on the flat surface.

(2) The pottery in this stage is still hand-made; but the clay, which is of a brick or terracotta colour, is greatly improved, and shows that a potter's oven must have been employed. The most remarkable feature is that, along with the white or polychrome patterns on dark ground, the origin of which has been noted, there appear vases with patterns in lustrous dark colour on buff ground, like the Mycenaean wares. Hitherto it had been supposed that the latter process was much later than the

[1] *Mon. Antichi*, vi. p. 333 ff., pls. 9-11; *Proc. Soc. Antiqs.* 2nd Ser. xv. p. 351 ff.

[2] *J.H.S.* xxiii. p. 157 ff.

[3] *Ibid.* pl. 4, figs. 6-14.

other[1]; but the Cretan evidence admits of no doubt as to their synchronism, even at this early stage of painted pottery in any form. The pre-Mycenaean character of the Early Minoan deposits is, for instance, proved by the entire absence of plain pottery of Mycenaean types. It is then clear that Crete developed both independently of, and with far greater rapidity than, the rest of the Aegean at this period. The painted patterns are usually of a Geometrical character.[2]

The middle deposits of the third millennium, found above the floors of the first palace, are, like the preceding, both polychrome and monochrome in their decoration. The former include most of the types formerly known as Kamaraes ware, the patterns being mainly but not exclusively Geometrical; the curvilinear are rather later in date. The commonest shape is one resembling a tea-cup.[3] In the next stage relief-work is introduced to enhance the polychrome effect, probably in imitation of metal. In the latest deposits a great decline is manifest, and the monochrome vases tend to assert themselves to the exclusion of the others.

That the period under discussion must have been one of great length is shown by the depth of the "Minoan" deposits; they are, moreover, so extensive at Knossos, and so scanty and isolated are examples from other sites, that it cannot be doubted that here we have the centre of the fabric. As regards their date we have good evidence from early Aegean deposits in Egypt. By means of Professor Petrie's finds at Kahun in the Fayûm, which include specimens of the best Minoan ware,[4] we are able to place the height of the period about 2500 B.C.

The appearance of the so-called Kamaraes ware is unmistakable, with its bright, almost gay, aspect, and the contrast of the colours with the lustrous black ground. The pigments employed are four in number—milky white, yellow ochre, brick-red, and purple-red. These vases are mostly made on the wheel, and the buff-coloured clay is fairly well levigated, as is

[1] See, for instance, Furtwaengler and Loeschcke, *Myken. Vasen*, p. vi.

[2] *J.H.S.* xxi. p. 97, fig. 31, will serve as an example.

[3] *Ibid.* xxiii. p. 171.

[4] *Ibid.* xi. pl. 14, figs. 5-10, p. 275.

From *Brit. School Annual*, ix.

STAND FOR VASE; KAMARAES WARE.

FROM PALAIOKASTRO, CRETE.

the slip, on which the pigments are directly laid; its lustre often almost rivals that of the best Hellenic pottery. Mr. Evans found some specimens in 1902 of an extremely delicate character, almost as thin as an egg-shell. The colours are, however, sometimes dull and powdery, and apt to flake away except when fired. The forms are of a Cycladic type, the favourite being a two-handled globular vase with spout, and a pear-shaped one-handled vase, also with a spout[1] (see also Plate XIV.[2]).

The decoration is, as has been indicated, plastic as well as pictorial; the relief ornaments are often of an elaborate type, as may be seen in some of Mr. Hogarth's finds.[3] Some vases are merely covered with knobs, or with a sort of honeycombing in relief[4]; in others toothed or bossed bands are employed, either simply or combined into complex patterns. In any case this plastic element is quite a new departure. The pictorial designs include geometrical and linear patterns, zigzags, network, concentric circles, spirals, and swastikas; leaves, rosettes, and other vegetable forms; fishes, and even in one case a human figure.[5] The chief field of decoration is the shoulder of the vase.

Although varying in the extent of their naturalism, the patterns exhibit considerable boldness and power of drawing; they seem to be drawn chiefly from floral or textile sources, and are closely parallel to the Thera vases, but more advanced. Some motives are of Mycenaean character, such as the use of rows of white dots[6]; on the other hand, the style of the fishes and human figure is more like that of the Geometrical vases.

Mr. Hogarth notes that metal types of Kamaraes cups appear in the hands of Kefti tributaries in the paintings of the tomb of Rekhmara (about 1550 B.C.), and he even found their Neolithic prototypes at Kephala, near Knossos.[7] He also traces a connection with the early Aegean pottery of Phylakopi in Melos. The Kamaraes pottery can be shown not to

[1] Cf. *Mon. Antichi*, vi. pl. 9, fig. 8; pl. 10, fig. 14.

[2] From *Brit. School Annual*, ix. p. 308.

[3] *J.H.S.* xxi. pls. 6, 7, p. 84 ff.

[4] *Mon. Antichi*, vi. pl. 9, figs. 2, 6; pl. 10, fig. 14.

[5] *Ibid.* pl. 9, fig. 10.

[6] *Ibid.* p. 339.

[7] *Brit. School Annual*, vi. p. 85. On the Kefti, see *ibid.* viii. p. 157 ff.

have survived the incoming of the new Mycenaean influences, but the patterns rapidly became conventionalised, and are replaced by the new motives of the Mycenaean wares. It may further be noted that fragments of Kamaraes ware have turned up not only in Egypt, as at Kahun (already mentioned), but at Tiryns, in the fifth and sixth Acropolis graves at Mycenae, and at Curium in Cyprus.

(3) The pottery of the "Late Minoan" period from the palace of Knossos falls into two groups—the "palace" style, and the ordinary Mycenaean fabrics. The former class of vases has been found in considerable numbers in the second palace, and also at Zakro and other sites. The vases are painted in a lustrous brown-to-black glaze on a buff hand-polished slip, with fine and elaborate naturalistic designs, including vegetable patterns, birds, and fishes; others, again, are more architectonic in character.[1] We also find adaptations of the Kamaraes style, with bands of white paint laid on the black varnish, the usual forms being a flat bowl and a small cup with flat handles like the Vaphio cups.[2]

In their decoration the most highly developed varieties of the "palace" style show a parallelism with the wall-paintings, the patterns consisting of rosettes, spirals, and conventional flowers; in some very naturalistic examples this is strongly marked, the designs of olive and myrtle wreaths and bulbous plants showing an almost Japanese fidelity to nature. Others, again, have marine subjects—seaweed, shells, and rocks. Lastly, there are the representations of the double axe, which Mr. Evans has shown to be a religious symbol.[3]

The whole of this pottery belongs to the third or highest period of Mycenaean pottery, a time when decadence was actually beginning to set in, concurrent with the end of the eighteenth dynasty. At this time all over the Aegean area, in Melos, Egypt, and elsewhere, the styles of pottery were perfectly uniform, and had clearly been imported from one centre.

[1] See for examples *J.H.S.* xxiii. p. 192 ff.

[2] *Brit. School Annual*, vi. p. 88.

[3] *J.H.S.* xxi. p. 99 ff. See the *larnax* published by Mr. Bosanquet in *Brit. School Annual*, viii. pls. 18-9: cf. *ibid.* vii. p. 52.

In the light of recent discoveries we can no longer doubt that this centre was Crete, and the previous history of its pottery and the early development of its technical processes, as well as its geographical position, point in the same direction. About the year 1500 B.C. the site appears to have been invaded and abandoned, with the consequent result that Mycenaean civilisation now spread all over the Aegean, centring chiefly in Greece, where it lasted several centuries longer. Of its influence on Cyprus we have already spoken.

Mycenaean vases had turned up in Crete for some time previous to 1899 in a sporadic fashion[1]; but these, being for the most part of the ordinary type, do not call for separate consideration. There is, however, one class that appears to be peculiar to the island. It consists of large "false amphorae" and other vases, made of a rough coarse-grained clay, and decorated in the "third Mycenaean" style with large cuttle-fish; at Knossos this was found only outside the palace, and was probably a coarse household ware. A good specimen has also been found at Curium in Cyprus.[2]

§ 4. MYCENAEAN POTTERY

BIBLIOGRAPHY

Furtwaengler and Loeschcke, *Mykenische Thongefässe* (1879), and *Mykenische Vasen* (1886); Dumont-Pottier, i. p. 47 ff.; Perrot, *Hist. de l'Art*, vi. p. 893 ff.; Pottier, *Louvre Cat.* i. p. 181 ff. General reference should also be made to Schuchhardt, *Schliemann's Excavations* (transl. E. Sellers); Schliemann's own works; Hall, *Oldest Civilisation of Greece*; Tsountas and Manatt, *The Mycenaean Age*; and other works.

We have already had occasion to deal to some extent with Mycenaean pottery in connection with Cyprus and Crete, but it is now necessary to review it as a whole in the light of the

[1] See Furtwaengler and Loeschcke, *Myken. Vasen*, pls. 13-4; *Ath. Mitth.* 1886, pl. 3 and pl. 4 (a large pithos with reliefs, for which compare p. 152 above); *Bull. de Corr. Hell.* 1880, p. 125, 1892, p. 295; Perrot, *Hist. de l'Art*, vi. p. 451 ff.; Pottier, *Louvre Cat.* i. p. 176.

[2] *Excavations in Cyprus*, p. 74, fig. 128 cf. Furtwaengler and Loeschcke, *op. cit.* pl. 14, No. 88; *Brit. School Annual*, vi. p. 91.

present state of our knowledge of this wonderful civilisation and its products. To enter here upon the wide and much-debated questions to which the discoveries of the last thirty years have given rise is of course beyond our province; but the pottery of the people to whom the name Mycenaean has been somewhat loosely given is of so homogeneous a character, although found in all parts of the Mediterranean, that it may be treated as a phase of Greek ceramics, independently of considerations of ethnography and chronology. First found in any quantity at Ialysos in the island of Rhodes, its exact position in the history of early art was not then recognised; but when the marvellous discoveries of Heinrich Schliemann at Mycenae became known to the world, including large numbers of similar vases, Sir Charles Newton readily recognised that the Ialysos vases in the British Museum belonged to the same class. It was not long before the whole number of vases of this type, now christened Mycenaean, was collected in a "Corpus" by two German scholars, with numerous illustrations; but since that time the excavations of "Mycenaean" sites in Cyprus and Crete must have doubled or even trebled the material available.

The pottery at Mycenae was found in four different positions, implying consecutive chronological stages, ranging roughly from the fifteenth to the tenth or even ninth century. On these grounds Furtwaengler and Loeschcke[1] distinguished four main classes; but it will be seen that these are capable of even more subdivision. There are, in fact, two main classes, distinguished by the use of *matt* and lustrous colour respectively; and of the first of these two, of the second four, subdivisions are possible.

Class (1) is indeed comparatively rare,[2] and only found at Thera and in the oldest tombs on the Mycenaean Acropolis; it represents the transition from the pottery of Troy and Thera to that of Mycenae. The subdivision is a purely technical one: (*a*) vases of pale coarse clay, with patterns in a brown

[1] *Myken. Vasen*, p. vi ff. The evidence from Crete, however, appears to upset this chronology, the vases with lustrous painting being there found on a level with the matt paintings on dark ground.

[2] For examples see Furtwaengler and Loeschcke, *Myken. Thongef.* pls. 1; 4, 13; 5, 20; 7, 40; 11, 52.

colour, some hand-made[1]; (*b*) wheel-made vases of a reddish and finer clay, the designs in black and pale red, occasionally white.[2] The decoration generally resembles that of the Thera vases, and animals occasionally appear.

(2) The vases with lustrous painting may be classified as follows:

(*a*) Badly levigated clay; floral motives in matt-white or red-brown on black ground.[3] A fine example of this class was recently excavated at Maroni in Cyprus, a large krater with a figure of a bird outlined in white on either side (Plate XII.).

(*b*) Similar clay, but coated with a white or yellow slip on which geometrical or floral patterns are painted in lustrous black.[4]

(*c*) Fine clay with polished yellow surface; designs in black turning to red or yellow, with occasional details in white; chiefly marine plants and animals, but occasionally (especially in Cyprus) human figures.[5] This class is by far the most numerous of all, but is not found in Thera. It corresponds with the period 1400—1000 B.C.

(*d*) Clay grey or reddish, less brilliant, as is also the black; large figures of quadrupeds and human figures.[6] The vases are sometimes painted *inside*, which is a sign of late date.

The structure of these vases is very varied, and no less than 122 different forms may be distinguished in the illustrations to the *Mykenische Vasen*. Most characteristic and popular is the "false amphora," as it is generally termed (German, *Bügelkanne*), a vase with spheroidal body, of varying size, with the peculiarity that the ordinary neck and mouth on the top are closed by a flat handle arching over the vase, and the only aperture is a spout on one side (see Plate XV. and Fig. 82). These are very widely distributed, but their decoration is as a rule very simple; they appear depicted on the paintings of Egyptian tombs of the eighteenth dynasty, and this has often been used as an argument for the dating of

[1] *Myken. Thongef.* pl. 1, fig. 6; *Myken. Vasen*, pls. 23-4.

[2] *Myken. Thongef.* pl. 8; pl. 11, 52; *Myken. Vasen*, pl. 23.

[3] *Myken. Thongef.* pl. 6, 32, 34.

[4] *Myken. Thongef.* pl. 12; *Myken. Vasen*, pls. 7, 25.

[5] Schliemann, *Tiryns*, pl. 22, p. 99, fig. 20; *Myken. Thongef.* pls. 2, 4; *Myken. Vasen*, pls. 26-34, 39-41.

[6] *Myken. Vasen*, pls. 37-41.

Mycenaean vases. But they must have remained in favour for a considerable period. Other favourite shapes are: a funnel-shaped vase with handle at the top, doubtless a reminiscence of a Hissarlik type (p. 258); a tall graceful two-handled goblet or kylix, almost invariably decorated with cuttle-fish (see Plate XV.), as the funnel-vases are with murex (purple dye) shells; a beaked jug (German *Schnabelkanne*), derived from Thera; a squat jar or pyxis, with three small handles (cf. Fig. 82); and a tall pear-shaped vase with three handles on a high stem, which is perhaps the prototype of the hydria. The large kraters are, as we have seen, peculiar to Cyprus. Rarer forms are a sort of mug, and a combination of the false amphora and pyxis. Mention should also be made of the painted λάρνακες or *ossuaria* found in Crete by Mr. J. H. Marshall (p. 268 above) and by Dr. Orsi.[1]

The technique presents several entirely new features, such as the use of a slip as a basis for the colours; the polished, brilliant, and even surface; and above all the lustrous black varnish, which was the peculiar pride of Greek potters, and is now a lost art. The comparative monotony of the colouring is probably due to a purely technical reason, namely, the difficulty of resisting the action of fire; otherwise such an artistic people would doubtless have exhibited the same richness of colouring in their pottery that we find in their frescoes.

The Mycenaean pottery is deservedly held in high estimation for its picturesque and naturalistic style, which in its reproduction of animal and vegetable forms often rivals Japanese art. Although its scope is remarkably wide, yet there is a strong preference for marine subjects—the cuttle-fish, the murex shell, the nautilus, and various kinds of seaweed or such plants as the *Vallisneria spiralis* (Chapter XVI.). In Fig. 82 two good examples in the British Museum are illustrated—one from Egypt, the other from Kalymnos.[2] Altogether there is an originality and poetry of ideas such as never appears again in Greek art; but that is not a peculiar possession of the potters, as the metal-work, gem-engraving, and fresco-paintings testify—above all, such masterpieces as the Vaphio

[1] *Mon. Antichi*, i. p. 201 ff., pls. 1-2.

[2] See *J.H.S.* xvii. pp. 75, 76.

To face page 273.

MYCENAEAN POTTERY
(BRITISH MUSEUM).

gold cups, or some of the wall-paintings recently discovered in Crete.

Religious ideas, on the other hand, are strangely conspicuous by their absence. Mycenaean mythology is so far almost non-existent in the art; and although attempts have at times been made to detect traces of early cults, as in the figures of men dressed as animals,[1] or the representations of the double axe,[2] they have not as yet met with universal acceptance. More improbable is the curious idea recently mooted,[3] that the subjects of the vase-paintings indicate an acquaintance with such theories as those of biological evolution.

FIG. 82. MYCENAEAN VASES WITH MARINE SUBJECTS (BRIT. MUS.).

Mycenaean pottery has been found on a very large number of sites throughout the Mediterranean. The most productive have been Mycenae, Crete, and Cyprus, especially the cemetery at Enkomi in the latter island. Other Cypriote centres are Curium, Agia Paraskevi near Nicosia, Maroni, and the neighbourhood of Dali and Larnaka (see p. 66). In Attica the Acropolis of Athens and the beehive tombs of Spata and Menidi

[1] Cook in *J.H.S.* xiv. p. 81 ff.

[2] Evans in *J.H.S.* xxi. p. 99 ff. Recent discoveries seem to leave little room for doubt as to the correctness of Mr. Evans' theories.

[3] *Rev. Arch.* xxvi. (1895), p. 1 ff.; xxx. (1897), p. 81 ff.: cf. *ibid.* xxviii. (1896), p. 24 ff.

have been most fruitful, and finds have been made at Haliki and elsewhere. In the Peloponnese the chief site is Tiryns, and many fragments have also been found at Nauplia; in Central Greece several sites in Boeotia, such as Orchomenos, may be mentioned. Of the Aegean islands, Rhodes and Melos are most conspicuous, especially the sites of Ialysos in the former island, Phylakopi in the latter. In Asia Minor, Mycenaean remains are rare, except at Troy, but in Egypt there is ample evidence of a close commercial relation, as in the finds at Tell-el-Amarna, in the Fayûm, and elsewhere. In the Western Mediterranean, Syracuse has yielded numerous fragments, and occasional finds have been made in Italy.[1]

Having reviewed the extent of Mycenaean influence, the next question we must consider is which, if any, was the centre whence this pottery was exported. It had been for some time observed that the early varieties of Thera, and those of Crete and Cyprus (*v. supra*), showed strong indications of local origin; but on the whole the Mycenaean pottery proper is remarkably uniform and homogeneous. It is perhaps possible to detect technical differences between the pottery, *e.g.*, of Athens and Rhodes, but they may be only differences of date rather than fabric. Furtwaengler and Loeschcke regarded Argolis as the centre of manufacture, at least for the later lustrous varieties[2]; Pottier, on the other hand, writing before the recent discoveries, thought that Crete was, after Thera, the original centre, and Argolis only subsequently, the pottery of Rhodes lying midway between. In the light of the Cretan discoveries it is now possible largely to disregard previous theories. We have seen that Mycenaean pottery found in Crete has a pedigree which no other region can claim, and that it can only have a local origin. We have also seen that the Cretan supremacy came to an end about 1500 B.C., and that, though the pottery may have continued to be made in the island, it ceased to be an exclusive centre, and for the remainder of the Mycenaean Age the art, learned in Crete, spread to other Aegean centres—Mycenae, Rhodes, and Cyprus.

A far more difficult question to decide is the ethnographical

[1] See *J.H.S.* xxiv. p. 125.

[2] *Myken. Vasen*, p. ix. ff.

one, together with the consideration of the relation of the Mycenaean civilisation to others in which the same decoration appears (as in the case of the spiral). One point seems to be abundantly clear, viz. that Mycenaean decoration owes nothing to Oriental influences. That there was a close relation with the East has already been indicated, and is much more apparent in other forms of Mycenaean art; but no student of this art in general can doubt that it is, as has been pointed out, purely spontaneous and unique, the art of a people of genuine artistic genius. Among the art of ancient races it stands alone in this respect, that of Egypt and Assyria, its only prominent rivals, being always essentially conventional; and herein lies its special distinction.

That the Mycenaeans were a maritime people admits of no doubt. It is shown by the position of their chief centres, by the evidence of their extensive commercial relations, and, as far as concerns their pottery, pre-eminently by the subjects which form the staple decoration. Hence of late years an attempt has been made to substitute for "Mycenaean" the more comprehensive term "Aegean," and there is much to be said in its favour. As regards the actual ethnographical position of the race, *Quot homines, tot sententiae*, may almost be said. They have been identified with the Achaeans, the Pelasgians, the Phoenicians, the Carians, and as combinations of Phrygians with Cretans, of Phoenicians with Greeks of Asia Minor.[1] But few of these terms have real historical value, and such identifications do not really advance the solution of the question.

A more real ground of battle is that afforded by the question of date, though on this point scholars now show a greater tendency to fall into line, and a period culminating in the years 1400 to 1100 or 1000 B.C. is now very generally accepted.[2] The question necessarily turns largely on the evidence afforded by Crete and Egypt, and so far as this is trustworthy it all points in the same direction. But it would be beyond the scope of

[1] See for a summary of the theories, Pottier, *Louvre Cat.* i. p. 200 ff.

[2] See Hall, *Oldest Civilisation*, chap. iii.; Pottier, *op. cit.* i. p. 209; and *Arch. Anzeiger*, 1892, p. 11 ff.

a work of this kind to do more than briefly summarise the general results of archaeological criticism.

An interesting study of Mycenaean ornamentation has been made by Dr. Riegl,[1] who deals generally with the principles underlying its vegetable motives, and points out that here we first meet with scrolls or continuous bands of foliage applied to a decorative purpose. These motives are peculiar to Greek art, and in Mycenaean design their origin is to be sought. In this way we may regard it as the immediate forerunner of Hellenic art, although its development was temporarily arrested by the Dorian invasion, just as the people who produced it formed the basis of the Hellenic race. The naturalism of Mycenaean ornament, which is seen both in continuous and in isolated patterns, is in marked contrast to the convention of Egypt, where the same motives may be in use. It is not, in short, the motive, but its treatment, which shows the independence of Mycenaean art. There are, again, other patterns, such as the spiral, which cannot be traced in Oriental art, and seem to be purely original, at least as far as concerns the Eastern Mediterranean.

Another recent writer, Dr. S. Wide, has noticed that where Mycenaean influence was originally strongest, as in Crete and Rhodes, there its characteristics were most strongly impressed upon the art of the succeeding period, and he is inclined to place the centre of the fabric in these islands or on the coast of the adjoining continent of Asia. At all events the Mycenaean influence shows itself more in the pottery of the islands than it does in Attica ; and, in Crete and Rhodes in particular, instances have been found of undoubted survivals of typical Mycenaean ornaments in later pottery.[2]

[1] *Stilfragen*, p. 112 ff.

[2] See Wide, in *Ath. Mitth.* 1897, p. 233; and for some general considerations on Mycenaean pottery and its achievements, Pottier, *Louvre Cat.* i. p. 247.

CHAPTER VII

RISE OF VASE-PAINTING IN GREECE

Geometrical decoration—Its origin—Distribution of pottery—Shapes and ornamentation of vases—Subjects—Dipylon vases—Boeotian Geometrical wares—Chronology—Proto-Attic fabrics—Phaleron ware—Later Boeotian vases—Melian amphorae—Corinth and its pottery—"Proto-Corinthian" vases—Vases with imbrications and floral decoration—Incised lines and ground-ornaments—Introduction of figure-subjects—Chalcidian vases—"Tyrrhenian Amphorae."

§ 1. THE GEOMETRICAL PERIOD

BIBLIOGRAPHY

Perrot, *Hist. de l'Art*, vii. p. 154 ff.; *Ann. dell' Inst.* 1872, p. 138 ff.; *Jahrbuch*, 1886, p. 94 ff.; 1899, pp. 26, 78, 188; *Ath. Mitth.* 1881, p. 106; 1892, p. 285; 1893, p. 73 ff.; 1896, p. 385 ff.; Pottier, *Louvre Cat.* i. p. 212 ff. For Boeotian Geometrical pottery, Böhlau in *Jahrbuch*, 1888, p. 325 ff.; for early Argive wares, Waldstein, *Argive Heraeum*, i. p. 49 ff.

THE Dorian invasion of Greece, which is generally supposed to have taken place in the twelfth century—the traditional date is about 1100 B.C.—was, like the contemporaneous Etruscan immigration (Chapter XVIII.), only an episode in the general displacement taking place throughout Europe. In Greece it caused a dispersion of the Achaean race, chiefly in the direction of Asia Minor, which, as we have already seen, probably gave rise to the stories of the Trojan War and subsequent adventures of the Achaean leaders. In other words, the Mycenaean civilisation was driven to seek a new home elsewhere, and to lay the foundations of a new artistic development in the cities of Aeolis and Ionia. But its disappearance from Greece was not complete, and Hellenic Greece was from the beginning an amalgam of the old and new elements, the Achaean (or Ionian)

and the Dorian, in which one or the other had at different times or in different places the pre-eminence. The Ionian element represents the civilisation of the Mediterranean, succeeding to that of the Mycenaean world; the Dorian, the influence of Central Europe.[1]

It has hitherto been a truism of archaeology that the Dorians brought with them from Central Europe a new form of art, of which the chief characteristic is that of *rectilinear and geometrical decoration*, forming, it is obvious, a marked contrast to the curvilinear and naturalistic Mycenaean designs. This new principle was thought to be most conspicuously illustrated by the pottery which now replaces the Mycenaean. But certain recent discoveries have given occasion for some scepticism in regard to the acceptance of this idea as conveying the whole truth; and even if they do not radically alter preconceived ideas, they are at least worthy of consideration.

At Aphidna in Attica a find has been made of very rude pottery, without glaze or varnish, but with decoration of a Geometrical character, sometimes painted.[2] Although earlier than any other pottery in Attica, it need not be pre-Mycenaean in date; it seems more likely to be a *contemporary survival*. Early wares have also been found in the islands, as in Aegina, with Geometrical ornament in *matt*-colour; nor must we forget that the Geometrical principle was known in Cyprus and the Cyclades, as also at Hissarlik, at a very remote age. From these data Dr. Wide has ingeniously drawn the conclusion that the Geometrical style was always indigenous in Greece,[3] pointing out that it was more likely and more in accordance with historical precedent that the Dorians, like Rome in later days, accepted the art of the people they conquered[4] than that they introduced their own and forced it upon the subjugated race. This theory has the additional merit of disposing of a difficulty which had always been felt. If the Geometrical pottery was Dorian, how do we account for its reaching its height in Attica, which was never at any time Doric,

[1] Pottier, *Louvre Cat.* i. p. 222-3.

[2] Wide, in *Ath. Mitth.* 1896, p. 385 ff.; see also *ibid.* 1893, p. 138.

[3] Cf. the results from the Argive Heraion (Waldstein, i. p. 49 ff.).

[4] Cf. Horace, *Ep.* ii. 1, 156: *Graecia capta ferum victorem cepit, et artes intulit agresti Latio.*

or influenced by Doric characteristics? But if it can be shown to be indigenous in Attica, the difficulty disappears.

Again, it is necessary to explain the varying character of Geometrical pottery in different parts of Greece, as compared with the homogeneity of the Mycenaean wares. If, as was supposed, the Geometrical style came full-grown into Greece, why should this be? Dr. Wide therefore maintains that there were in Greece *concurrently* a *Bauernstil* or domestic art, aboriginal and industrial, which produced the rude geometrical fabrics, and a *Herrenstil* or *art de luxe*, exotic and ornamental, which we know as Mycenaean. With the upheaval and dispersion of the Achaean aristocracy this art practically died out, but the humbler industry held its ground, and gradually forged its way to comparative excellence, perhaps learning much from Mycenaean technique.

The real novelty of the developed Geometrical pottery which now manifests itself in Greece consists in its evolution *as a style*, and the combination of the patterns into an artistic system, with a continuous progress towards symmetry and rhythm. Geometrical patterns are indeed the property of all primitive peoples, and are no less spontaneous and universal in their origin than the folk-lore stories which we find adopting the same or similar forms in all parts of the world. In Greece, no doubt, the cultured traditions of Mycenaean art had in course of time their due effect, and both in technique and in ornament left their impress on the inferior fabrics,[1] as we have seen to have been the case, especially in the Greek islands. It is an influence which is not confined to the pottery, but made itself felt, for instance, in architecture. It can hardly be doubted that in the Lion Gate of Mycenae we find the prototype of the Doric column; and the parallel with the Geometrical pottery can be further followed up when we consider that Doric architecture also became the common property of Continental Greece, and also realised its highest perfection at Athens.

The Geometrical pottery has been found in great numbers in Attica and Boeotia, in the islands of Aegina, Melos, Thera,

[1] M. Pottier notes the unexpected repetition of curvilinear elements in Geometrical pottery (*Louvre Cat.* i. p. 223).

Rhodes, and Crete,[1] in Argolis and Laconia, in Sicily and Etruria, and also isolated specimens in Cyprus and the Troad.[2] That found in Italy and Cyprus is certainly exported from the mainland. It has been observed that each region has its own peculiar variety of the style, and this is especially conspicuous in the examples from Attica and Boeotia.[3] The first writer who attempted to deal with it scientifically was Conze,[4] but owing to its clearly-defined characteristics it has always been more or less correctly treated by the older schools of archaeologists. But with a more extended outlook over the fabrics of early Hellas, many problems have arisen in connection with it which have called for more recent discussion, and the writings of Kroker, Böhlau, and Wide in particular should be studied.[5]

At Mycenae fragments of Geometrical pottery were found both on the surface and in the palace, among the débris of the huts built on its site; while in the island of Salamis there is a cemetery of distinctly transitional character, containing false amphorae with linear decoration and combinations of the spiral with the maeander.[6] It may be noted that a similar transitional cemetery was found by Mr. Paton at Assarlik in Caria,[7] and that the "sub-Mycenaean" pottery of Cyprus (p. 246) has been shown to exhibit the same combination of features. These facts fall into line with what has already been said as to the survival of Mycenaean art in these fabrics.

From the fact that large quantities of this ware have been obtained from the tombs of the Kerameikos near the Dipylon Gate of Athens, chiefly between 1870 and 1891, it has frequently been styled *Dipylon ware*; but it is questionable whether this title should not be reserved for varieties peculiar to this site. These Dipylon tombs were in the form of deep quadrangular

[1] For Melos, see *Jahrbuch*, 1886, p. 112; for Thera, H. von Gaertringen, *Thera*, ii. p. 127 ff.; *Ath. Mitth.* 1903, p. 1 ff.; for Crete, *Brit. School Annual*, 1899-1900, p. 91.

[2] Cesnola, *Cyprus*, pl. 29; *B.M. Excavations in Cyprus*, p. 103, fig. 150; Dörpfeld, *Troja und Ilion*, i. p. 304.

[3] See Wide's study of the pottery in the Athens Museum, *Jahrbuch*, xiv. (1899), pp. 26, 78, 188; xv. (1900), p. 49.

[4] *Zur Geschichte d. Anfänge d. Kunst*, p. 1 ff. (*Sitzungsber. d. k. Akad. d. Wiss.* Wien, 1870, lxiv. p. 505 ff.).

[5] See Bibliography.

[6] Perrot and Chipiez, vii. pp. 51, 208.

[7] *J.H.S.* viii. p. 68 ff.; cf. *Ath. Mitth.* 1887, p. 223 ff.

trenches, and the bodies had been sometimes inhumed, sometimes cremated, the bones being placed in vessels of bronze or clay, containing smaller objects. Above the trenches was a layer of earth mixed with burnt offerings, on the top of which, *outside the tombs*, were placed the large painted vases (representing the tombstones or stone sepulchral vases of later times) which now form a prominent part of the collections at Athens and in the Louvre.[1]

Turning to treat of their general characteristics, we note that the vases are all wheel-made, of a carefully-prepared red clay covered with a lustrous and impermeable yellow slip, on which the designs are painted in the same lustrous black as the Mycenaean wares. Later, but rarely, white is introduced as an accessory. As regards the shapes, there is less variety than in Mycenaean pottery. They include the typical forms of Dipylon vases, a large wide-mouthed *krater* on a high stem, and an *amphora* with cylindrical neck and side-handles; also the *lebes*, the cylindrical jug or *olpe*, the wide bowl or *skyphos*, and the *pyxis* or covered jar. Open-work stands for vases are often found in the Cyclades.[2] On the covers of the *pyxides* a group of two or three rudely-modelled horses sometimes forms the handle. In considering the forms generally, it is permissible to say that the potter of the day was in advance of his Mycenaean predecessor, although the painter was not.

The decoration follows a development which permits of the division of Geometrical vases into three periods, in which we follow Kroker[3]: (1) for a long time it is exclusively limited to Geometrical patterns, and (2) even when quadrupeds and birds are introduced they are still only decorative (as in Boeotia); (3) finally, while the animals take a subsidiary place, human figures and large compositions spring into prominence. But this final development is chiefly characteristic of Athens. Wide distinguishes four varieties of the Dipylon ware: (*a*) amphorae, with black varnished bodies and designs only on the neck; (*b*) "black Dipylon ware," mainly varnished, but more

[1] See p. 35, and *Ath. Mitth.* 1893, p. 73 ff.

[2] *E.g.* B.M. A 383, 384; Louvre, A 490, 491; *Ann. dell' Inst.* 1872, pl. K, fig. 12.

[3] *Jahrbuch*, 1886, p. 95.

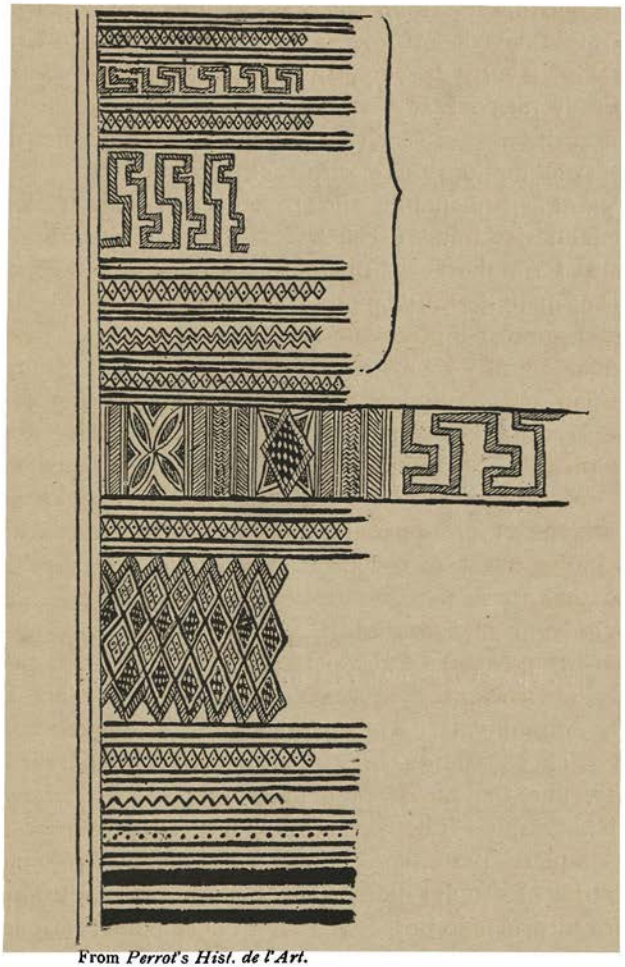
decorated than (*a*); (*c*) large vases, with linear decoration or figures all over in horizontal friezes (the tomb-amphorae); (*d*) as the last, but with vertical panels, divided like metopes. His view is that these represent a continuous development, but that the style did not last long in Attica. Returning to Kroker's classification, it must be borne in mind that the three classes are not successive in point of *time*, only in artistic development; the plain linear decoration survived throughout, and is often found in tombs contemporaneously with the figure subjects.

The patterns are mainly, though not exclusively, rectilinear, and sometimes extremely elaborate. The favourite are a large bold maeander, chevrons, chequers, and arrangements of hatched lines; also squares, with diagonals and much ground-ornament. Among the simpler motives are lines of dots, triangles, lozenges, and various forms of crosses; but concentric and "tangent" circles occur not infrequently, the latter being clearly derived from the Mycenaean spiral, and one vegetable motive appears in the form of a conventionalised leaf, later developed into a rosette. M. Perrot[1] gives a very instructive diagram of the typical scheme of ornamentation on the neck and body of a vase, including most of the principal varieties. It should also be noted that these patterns occur frequently on the field of the designs as ground-ornaments, to cover the vacant spaces.

In the arrangement of the patterns an architectural instinct is clearly at work, the influence of the Doric metope being especially prominent. They are usually arranged, as the diagram (Fig. 83) shows, in horizontal bands round the neck and body, like the bands of painted ornament on the entablature of a temple. The metopes and triglyphs are represented by large square patterns of ornament, separated by narrow vertical strips of simpler motives (cf. Fig. 84). The introduction of the frieze principle proper is a later development. Generally speaking, there is an invariable tendency towards symmetry and refinement in the arrangement. When figure subjects begin to be introduced, it betokens a great advance in decorative art, especially over the Cypriote and other varieties of the style.

[1] *Hist. de l'Art*, vii. p. 165, reproduced in Fig 83. The part bracketed denotes the ornamentation of the neck.

In the tendency to a *horror vacui*, the style is inferior to Mycenaean, as also in the figure-drawing, of which more anon. The absence of any plant-ornament is most characteristic, as



From *Perrot's Hist. de l'Art.*

FIG. 83. SCHEME OF ORNAMENTATION ON GEOMETRICAL VASES.

showing the great change from the Mycenaean spirit; but it was not long before this element was destined to reappear and virtually usurp the field of decoration.[1]

[1] See Riegl, *Stilfragen*, p. 150 ff.

In regard to its ornamentation the Geometrical style may be said to have attained success. It is not so, however, with its representations of living form, least of all those of human beings. But this is only in accordance with the principle which M. Pottier styles the *hierarchie des genres*, a principle which is universal in all early development of Greek art, and to which we have already referred (p. 245 : see also p. 315). Briefly it is this : first, the predominance of pure *ornament* and the perfecting of the same ; secondly, the employment of *animal* forms and the relegation of ornament to a subsidiary place ; thirdly and lastly, the rise and development of *human* forms, the other animals ceasing to form the main theme of decoration, and sinking to the level of mere decorative adjuncts.

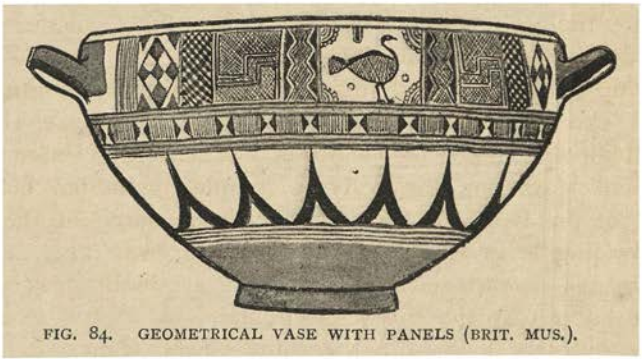


FIG. 84. GEOMETRICAL VASE WITH PANELS (BRIT. MUS.).

Hence we find that figures of animals when first introduced on Geometrical vases are of a conventional and ill-drawn character, but show a gradual progress and development. Human forms again, which now appear for the first time, are only seen in a very rude and undeveloped stage, from which there is continuous development throughout the archaic period till perfection is reached in the fifth century. Their original extreme conventionality may be the result of a training in Egyptian canons of art.

The favourite animal motives are the horse, the deer, and water-fowl. The first also appears in a plastic form, surmounting the covers of vases and forming a sort of handle. Usually a single animal is seen in a metope-like panel (cf. Fig. 84),

and the frieze system is seldom found at this period. A curious conception is that of a lion or wolf devouring a man, whose legs are seen protruding from its mouth, and this appears to have been adopted by the Etruscans, on whose archaic bronze-work and bucchero vases it sometimes occurs.[1] The lions on the Geometrical vases, it may be noted in passing, are obviously drawn without knowledge, and borrowed from Asiatic art; the same conventional type obtains at a later date, as in the Burgon lebes (below, p. 296).

Human figures are almost confined to the large vases from the Dipylon cemetery, which are evidently a purely local product; almost the only exceptions are two from Boeotia (see below, p. 288), and one from Rhodes in the British Museum (A 439). The infantile and barbarous style of the figures recalls in a measure the primitive marble idols from the Cyclades; there is seldom any actual distinction of sex, the narrow waist, wide hips, and tapering limbs being apparently common to both. The figures being painted in plain silhouette, there is no attempt at rendering features. Where it is intended to represent a warrior, the body is completely hidden behind a shield of the Boeotian type ⟅, a ready resource of the artist for avoiding anatomical difficulties, which was also adopted later by his seventh-century Corinthian successors, except that in the latter case the shield is circular.

The subjects include battles and naval scenes, dances of women hand in hand, and funeral processions. From the combination of ships with funeral scenes, it would seem that they were sometimes used for carrying the dead. A remarkable lebes recently acquired by the British Museum[2] is decorated with a large ship-of-war with two banks of rowers (bireme), and appears to represent a warrior landing therefrom on shore.[3] The funeral scenes on the great Dipylon vases are exceedingly elaborate, and exhibit a corpse drawn on a bier, accompanied by chariots and bands of mourning women beating their heads.[4]

[1] *E.g. B.M. Cat. of Bronzes*, 600.

[2] *J.H.S.* xix. pl. 8.

[3] For other instances of ships on Dipylon vases, see Chapter XV. § 7; also *Mon. Grecs*, xi.-xiii. (1882-4), p. 40 ff.; *Rev. Arch.* xxv. (1894), p. 14 ff.

[4] Cf. Perrot, *Hist. de l'Art*, vii. p. 57.

By a conventional attempt at perspective the figures are often placed *above* the central group when they are supposed to be on its farther side, just as, in the fresco from Tiryns, and an "Island-gem" of the Mycenaean period, a man leading a bull is represented over its back.[1]

Two very interesting specimens of Geometrical fabrics are in the museum at Kopenhagen,[2] late indeed and almost transitional in character, but still typical. One is a deep two-handled cup or bowl with long panels on either side, in two tiers; the upper ones are filled with ornaments and animals, and in the lower are several subjects—combatants, lyre-players, a dance of armed men with shield and spear, two lions devouring a man (see above), and men with jugs and lustral branches preparing for some religious rite. The other is a jug, with very little ornamentation except on the background of the designs, which also include several subjects. On the neck is a man holding horses; on the shoulder, dogs pursuing a hare; and on the body, combats on land and sea.

In the range of subjects a general correspondence with epic poetry is to be noted,[3] as in the funerals and combats; but there are some important discrepancies, such as the *quadriga* in place of the Homeric *biga*, the types of the ships, and in the appearance of horsemen, which are of course unknown to Homer.[4]

The Geometrical vases found in Boeotia form an important and distinct local variety, which calls for separate treatment. The existence of this local style was first suspected by Furtwaengler in 1878 on seeing the first finds made at Thebes, and it has since been studied with great care and detail by Böhlau.[5] Among these finds were, in addition to the recognised local pottery, ordinary (imported) Dipylon vases, and later Proto-Corinthian and Corinthian wares, as well as bronze fibulae and terracotta figures, to which subsequent reference must be

[1] Schliemann, *Tiryns*, pl. 13; *J.H.S.* xvii. pl. 3, p. 70.

[2] *Arch. Zeit.* 1885, pl. 8.

[3] *Jahrbuch*, i. (1886), p. 119.

[4] The most important of the Dipylon vases have been published in the *Monumenti*, vol. ix. pl. 39, and *Annali*, 1872, pl. 1, besides the others already mentioned. See also Cesnola, *Cyprus*, pl. 29; *Louvre Cat.* A 516-19, 526, 575; *Athens Cat.* 196-214, 350, etc.

[5] *Jahrbuch*, 1888, p. 325 ff.

made. Similar pottery was also found in large numbers on the site of the temple of Apollo at Mount Ptoös in 1885-91, and other examples have turned up at Tanagra. It has been suggested, though on somewhat slight grounds, that Aulis was the centre of the local fabric; and, further, it was supposed by Böhlau, who is supported by Perrot,[1] that the Boeotian wares represent a primitive phase of the Geometrical pottery, anterior to the Dipylon, and consequently that Boeotia is the original home of the style as a whole. But in view of what has been said above, and generally of the relation of the Boeotian pottery to the Dipylon, and to the later Proto-Corinthian, it seems doubtful if this view can be maintained. Moreover, it has been pointed out by M. Holleaux,[2] in discussing the Ptoös finds, that the pure Geometrical vases were found at a lower level than the typical local wares, and were never found either with them or with the analogous terracotta figures. This certainly points to the later origin of the Boeotian pottery.

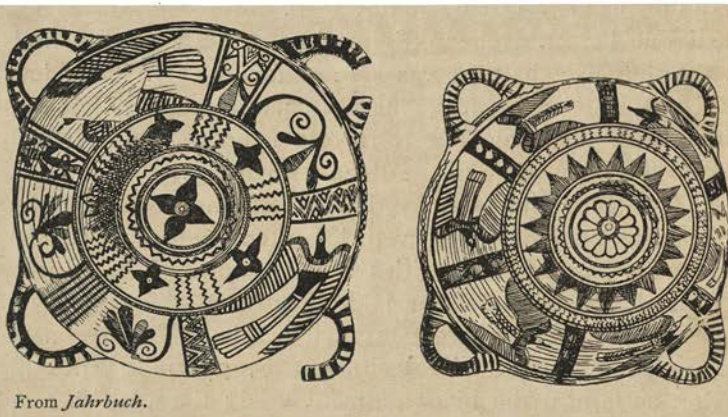
The local clay differs from that of Athens both in nature and appearance, being less well levigated and of a reddish-yellow colour, as compared with the warm brown of the Dipylon. Further, the designs are not laid directly on the clay, as in the latter, but on a thin creamy-yellow slip, as in Mycenaean and Ionian pottery. The technique is, generally speaking, inferior, as is also the black pigment used; the work is rough and hasty, the drawing careless and inaccurate.

The vases are mostly small, at least compared with those of the Dipylon, and the favourite shape is the *kylix*, with or without a stem. Out of seventy-two examples given by Böhlau, no less than fifty-five take this form. He traces its development from a deep bowl with "base-ring," which seems to be related to the Cypriote white-slip one-handled bowls; but the Boeotian type has at first two small finger-pieces in place of handles, afterwards replaced by a single handle for hanging up. The majority, however, have no less than four handles, and that they were still intended for suspension is shown by the method of decoration which can only be properly seen in this position (cf. Fig. 85).

[1] *Hist. de l'Art*, vii. p. 212.

[2] *Monuments Piot*, i. p. 35 ff.

There is a wearisome uniformity in the patterns, and indeed in the decoration generally. Only two examples are known from Boeotia with human figures,[1] and the rest belong to the intermediate class, with its combination of animals and decorative patterns. On the exterior is usually a broad frieze, divided by bands of ornament into four or five fields, in which are birds or palmette patterns; these panels are not necessarily arranged with reference to the position of the handles. The patterns comprise rows of vertical zigzags, dotted lozenges, chevrons, latticed triangles, rosettes, and scrolls, the first-named being specially characteristic of Boeotia. It is to be noted that the



From *Jahrbuch*.

FIG. 85. BOEOTIAN GEOMETRICAL VASES (BERLIN MUSEUM).

typical Athenian motives, the maeander and the ornamented square, do not occur; in fact, these bowls have no analogies in the Dipylon ware. But it is also interesting to observe the appearance of a new vegetable element in the form of friezes of palmettes and lotos-flowers.[2] The importance of this feature is due to the extensive part it was destined to play in the ornamentation of Greek vases all through the sixth century. Some of the palmettes are remarkably advanced, and the whole pattern is even emancipated from the confinement of the frieze, and treated freely without regard to space.[3] Böhlau, in his

[1] A 575 in the Louvre, with funeral scenes; Fig. 86 below.

[2] See Riegl, *Stilfragen*, p. 173.

[3] Riegl, fig. 81.

analysis of the ornament as a whole, notes its independence of the Athenian vases, though remaining a parallel and closely-related development.

Individual vases do not call for much comment, but there is a curious coffer of terracotta from Thebes in Berlin (Fig. 86),[1] painted with figures in this style. The subjects include the Asiatic Artemis, a hare-hunt, a woman leading a horse, a horse tied up, and two serpents erect, confronted. The ground is filled in with rosettes, crosses, and other ornaments, such as the so-called *swastika*.

From *Jahrbuch*.

FIG. 86. COFFER FROM THEBES: BOEOTIAN GEOMETRICAL STYLE (BERLIN MUSEUM).

While on the subject of the Boeotian vases it is worth while to call attention to the remarkable parallels presented by two other classes of objects also found in that region: bronze fibulae and terracotta statuettes. The former may be regarded as important chronological evidence, inasmuch as their development can be clearly traced from their first appearance at the end of the Mycenaean period (about the tenth century), and similar types have been found in Rhodes, at Olympia, and elsewhere. The characteristic of the Boeotian fibulae is the flat

[1] *Cat.* 306; *Jahrbuch*, 1888, p. 357.

plate which forms the foot (in some cases the central part or bow), and is generally of a quadrangular form, decorated with an engraved subject, usually animals or birds of a similar type to those painted in the panels on the vases. More rarely ships or human figures are found.[1]

The terracotta figures (p. 123), on the other hand, bear a different relation to the pottery. They are flat board-like figures (*σανίδες*), known to the modern Greek digger as "Pappades," the high head-dress which they wear suggesting to him the well-known hat of the orthodox "Papas" or priest. The flat surface of the body gives scope for ornamentation representing embroidered robes,[2] and the patterns employed are just those which are seen on the vases; and, moreover, the method of painting is the same, the figures being covered with a buff slip, the patterns in black with purple details. It should be remarked that some of these figures are comparatively developed in style,[3] and that they are practically *later imitations* of the decoration of the vases.

In considering the Geometrical vases as a whole, we are struck with the laudable aspirations of the artist, who, though unable to execute his new ambitions with complete success, yet shows in his work the same promise of the future that is latent in all early Greek art. His best achievement is in the ornamentation. Oriental influences as yet count for very little, though they are perhaps to be discerned in the human figures, as already noted; Kroker also thinks that the nude female figures on the larger vases are due to Oriental art.[4] In any case they are not to be traced until late in the period, and first, as might be expected for geographical reasons, in the fabrics found at Kameiros in Rhodes.

The question of chronology must next be considered. That the developed Geometrical style succeeds to the Mycenaean, and forms a link between it and the early Attic attempts at black-figured ware, of which we shall subsequently treat, is sufficiently

[1] On these fibulae see *B. M. Cat. of Bronzes*, p. xxxix, and Nos. 119-21, 3204-5.

[2] This would seem to suggest a textile origin for Geometrical patterns, at least on Boeotian vases.

[3] *E.g.* B 57-8 in Brit. Mus.

[4] *Jahrbuch*, i. (1886), p. 99 ff.: see also, for relations with Egypt, p. 114.

clear. It may also be laid down that the Dipylon ware represents the last stage of Geometrical decoration, being in point of fact too far advanced to be regarded as a purely typical Geometrical ware. Such data as the finding of iron in the tombs, or the evidence of finds at Troy,[1] also tend to place the beginning of the style at least as early as the tenth century. It has also been noted that the figures correspond closely with the bronzes of Olympia which are dated about the ninth century, and this, if accepted, necessitates placing the simpler linear decoration back as far as the tenth. The lower limits of the style may be roughly fixed by the evidence from the tombs of Etruria, discussed in Chapter XVIII., at about 700 B.C.

Next, there is the evidence afforded by the ships,[2] which it should be noted are all of the bireme or διήρης form, with two banks of oars. The invention of the trireme, as we learn from Thucydides (i. 13, 5), was due to Ameinokles, about the year 704 B.C. Hence Kroker's dating of the Dipylon vases about the year 700 can hardly be accepted. But the eighth century may be taken as representing the latest period of the Geometrical pottery, both in Attica and Boeotia. The curious inscription engraved on a Dipylon vase from Athens is dealt with elsewhere (Chapter XVII.); undoubtedly the earliest known Attic inscription, its value as evidence is limited to that of a *terminus ante quem*, from the fact that it was probably engraved at a subsequent time to the manufacture of the vase.

The question of centres of manufacture is one that has already been the subject of some discussion,[3] the result of which has been to show that there is no complete homogeneity in the wares from different sites, and consequently no one central fabric. The colossal funerary vases, which, it may be remarked in passing, stand at the head of a long line of funerary fabrics and show the Athenian fondness for this class of vase,[4] were not, and could not have been, generally exported, in spite of the notable exception at Curium. The ordinary wares might have

[1] Dörpfeld, *Troja und Ilion*, i. p. 304 ff.

[2] See Pottier, *Louvre Cat.* i. p. 232, and *Ath. Mitth.* 1892, p. 285.

[3] *Jahrbuch*, 1886, p. 106; Pottier, *op. cit.* p. 229.

[4] In the B.F. period, pinakes and prothesis-amphorae (Athens 688-690, 845-847; Berlin 1811-26, 1887-89); in the R.F. period, the white lekythi.

been made in some one place (probably a Dorian centre, not Attica or Boeotia); but we have seen that most finds, as in Rhodes, present local peculiarities.[1] Athens at this period was not sufficiently advanced to become the centre of large potteries, and did not become so, as we shall see, before the age of the Peisistratidae; such vases as were made were strictly confined to special purposes. It is a curious fact that very little Geometrical ware was found on the Acropolis.

The Geometrical pottery of Cyprus has already been discussed in its relation to that of Greece (pp. 249, 253)[2]; but there is yet another region which passed through a Geometrical period similar to that of Greece, and that is Etruria (see Chapter XVIII.). It is, however, better illustrated by the metal products of the Villanova period, such as the bronze discs and large cinerary urns, than by the local pottery, which never reached the same level as in Greece; in the former the same combinations of elaborate ornament with rude animals and yet ruder human figures may be witnessed, and it is possible that importations from Greece may have had a share in influencing these products. They cover the period from the tenth to the eighth century B.C.

§ 2. Attica, Boeotia, and Melos

Following on to the Geometrical vases both in chronological and artistic sequence is a small class of Athenian vases, which, more for convenience than with regard to strict accuracy, have been styled **Proto-Attic.** The term has this much of truth in it, that the group may be said to stand at the head of, and in direct relation to, the long series of painted vases produced in the Athenian potteries for some two centuries afterwards. It is only of late years that a sufficient number of these vases has become known for them to be studied as a separate class, and even when Böhlau first drew attention to them, *in* 1887,

[1] See Pottier, *op. cit.* i. p. 135 ff.

[2] See also *Ath. Mitth.* xiii. (1888), p. 280.

only two or three were known. The list up to date is as follows (the order being roughly chronological) :—

1. Athens 467 (Couve's *Cat.*)	Amphora	Kerameikos.	*Ath. Mitth.* 1892, pl. 10.
2. Berlin 56.	Amphora	Hymettos	*Jahrbuch*, 1887, pl. 5.
3. Athens 468	Hydria	Analatos (Phaleron)	*ibid.* pls. 3, 4.
4. Athens 464	Lebes	Thebes	*ibid.* pl. 4.
5. Athens 469	Amphora	Pikrodaphni	*Bull. de Corr. Hell.* 1893, pls. 2, 3.
6. Athens Mus.	Amphora	Kynosarges	*J.H.S.* xxii. pls. 2-4.
7. Athens 650	Fragment	Aegina	Benndorf, *Gr. u. Sic. Vasenb.* pl. 54.
8. Athens 657	Amphora	Kerameikos.	*Ant. Denkm.* i. pl. 57.
9. Athens 651	Amphora	Peiraeus	Ἐφ. Ἀρχ. 1897, pl. 5.
10. Berlin 1682	Lebes	Aegina	*Arch. Zeit.* 1882, pls. 9, 10.
11. B.M. A 535	Lebes	Athens	Rayet and Collignon, p. 43 = Fig. 87.

We may also add to this list Athens 652-664, a vase from Aegina (*Ath. Mitth.* 1897, pl. 8), B.M. A 1531 (*Bull. de Corr. Hell.* 1898, p. 285), and another at Athens (*ibid.* p. 283).

It will be noticed that the majority are of the amphora form, and that all without exception have been found in or near Athens, which leaves little room for doubt as to their origin.

A close connection with the Dipylon vases may be observed in the first three, not only in shape and technique, but in decoration. In No. 2, which we may take as typical of the oldest form of the Attic amphora, a combination of Geometrical and Mycenaean ornament is to be observed, but the figures of the warriors are purely Hellenic, like those of the Euphorbos pinax (p. 335). The shape of No. 3 is typical of the Geometrical vases, with its long neck and slim body, and it is perhaps more accurately called a three-handled jug than a hydria, though at the same time it is clearly the prototype of the later Attic hydria. The panel on the neck of the vase (also

seen in No. 6) is also a Geometrical feature, and the figures therein are quite in the Dipylon style. On the other hand, in the arrangement of the designs in continuous friezes without vertical divisions we trace the incoming influence of a foreign style—the Rhodian or Ionian. Other motives again, such as the birds and the vegetable ornaments, have nothing of the Geometrical or Ionian about them, and may perhaps be directly derived from Mycenaean vases. But the typically Geometrical lozenges, zigzags, etc., still hold their own. In No. 6 Mr. Cecil Smith notes that the ornamentation covering the field of the design is partly rectilinear and geometrical, partly floral and of Mycenaean origin. The spiral pattern which here closes the design, and is also seen on No. 1, is again an instance of Mycenaean influence, and is a motive which became exceedingly popular. In another seventh-century class, the so-called Melian vases, it is absolutely overdone, but the more restrained Attic tradition is preserved for many years as an appropriate decoration for the division of the designs under the handles, especially in the red-bodied amphorae of the developed B.F. style. This vase has some other unusual features, such as incised lines, which are also found on some early Attic fragments from the Acropolis,[1] but seem to appear equally early at Corinth, so that it is impossible to say certainly if the process is an Attic invention. At all events it is not Ionian, as its place is taken on the east of the Aegean by lines of white paint (*e.g.* in the Clazomenae sarcophagi). Curiously enough, in this same vase (No. 6) may be noted attempts at this very process, here, no doubt, as on the Ionian vases, due to Mycenaean influence (see p. 331); but it is unique in early Attic work.[2] The peculiar treatment of the eye and hair is also worthy of attention.

To sum up the characteristics of the Proto-Attic vases, it may be said that they represent the transformation of the Attico-Dorian element into the Attico-Ionian, just as we shall see in the next stage a further transformation under new influences into Attico-Corinthian (p. 324). The Ionian influence brings with it into Attica not only a revival of Mycenaean elements, but also

[1] *Ath. Mitth.* 1895, pl. 3.

[2] See *J.H.S.* xxii. p. 35.

traces of Orientalism.[1] The general appearance of the decoration links it with the Geometrical, but closer examination shows the admixture of spirals, rosettes, and lotos-flowers with the lozenges and zigzags, while the Geometrical animal-types are combined with new ones from Ionia, such as the lion, and the funeral scenes and combats are supplanted by Centaurs and winged genii of Assyrian character.[2] Further, there is a distinct tendency to get rid of the old silhouette and to draw in outline, a practice typical of Ionia and a direct heritage from Mycenaean vase-paintings. As in the Rhodian vases, the bodies are rendered in full colour, the heads in outline; while the practice of covering the field with ground-ornaments is also a peculiarly Rhodian characteristic. These latter, however, gradually disappear, as do the Geometrical conventions in the drawing of the figures.

The amphora-type develops steadily onwards from the Berlin Hymettos amphora, which, as has been pointed out, is the oldest Attic variety. In some of the forms, as in No. 5, there are traces of a metallic origin, shown by the open-work handles and other details.[3] Generally speaking, there is a tendency towards the colossal, and towards emphasising the figure-decoration, not only by increasing the size of the figures, but by confining the subject to one side. M. Pottier thinks that this is due to architectural influences, and suggests a comparison with a temple-façade. But the local traditions are still strong, and in spite of the influence of the lively and original Ionic style, the vases remain "continental" at bottom, the drawing always soberer and more powerful throughout. In many respects there is, as we shall see, a close parallelism with the so-called Melian fabrics.

No. 11, the large Burgon lebes in the British Museum (Fig. 87), is one of the latest representatives of the Proto-Attic class; its Ionic-looking lions and "Rhodian" wealth of ground-ornaments

[1] Ionian influence in the early part of the sixth century is also indicated by the finds of Rhodian and Naucratite pottery on the Acropolis at Athens; and in another way by the style of the vases found at Vourva and others from Eretria: see Böhlau, *Aus ion. u. ital. Nekrop.* p. 116; Nilsson in *Jahrbuch*, 1903, p. 124 ff.

[2] Cf. Athens 464, 469; *Jahrbuch*, 1897, pl. 7; *Notizie degli Scavi*, 1895, p. 186, as examples of the transition.

[3] Cf. the large Boeotian πίθοι (Plate XLVII., and *Bull. de Corr. Hell.* 1898, p. 497 ff.).

seem to suggest Asiatic influences, the presence of which has been accounted for above. Moreover, the loop-pattern on the reverse is distinctly Proto-Attic, and finds its parallels on vases found at Eretria,[1] as well as on others of the class under consideration.

Another interesting point in connection with the Proto-Attic vases is the introduction of mythological subjects, as on No. 6 (Herakles and Antaios), No. 8 (Herakles and the Centaur Nessos), No. 10 (Perseus and Athena, and a Harpy[2]). The only parallel to this early appearance of myths on vases is to be found in the Melian class (see below, p. 301), the Aristonoös

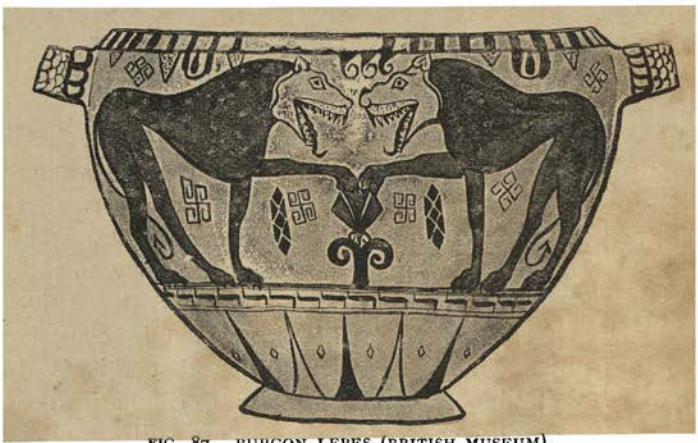


FIG. 87. BURGON LEBES (BRITISH MUSEUM).

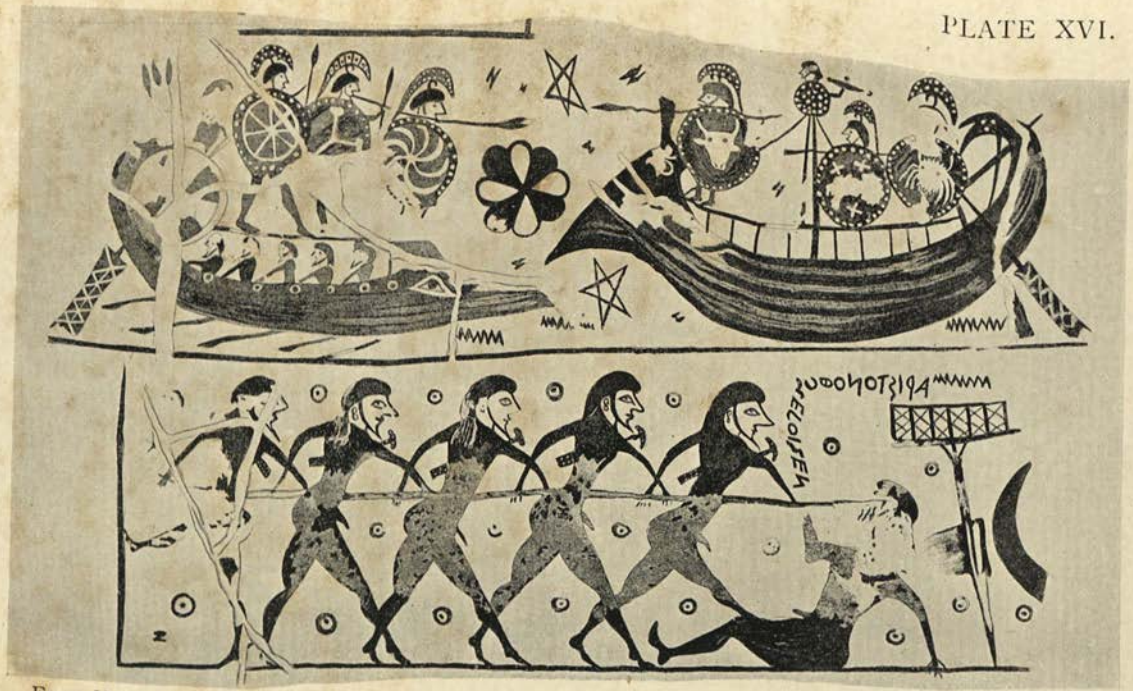
krater (see below) and the Euphorbos pinax (p. 335), which, however, is of later date. It will be seen that they only occur in the later group of the Attic vases.

On two of these it is to be noted that inscriptions occur, identifying the figures (Nos. 8 and 10). These are the oldest painted inscriptions on Attic vases, but henceforward they increase in number, at least in the Athenian and Corinthian fabrics; they are always more characteristic of the mainland than of Asia Minor.[3] There are two early signed vases which may possibly represent the work of Athenian artists prior to the

[1] Athens 665-66: cf. 469.

[2] See Chapter XIV.

[3] See Chapter XVII.



From *Wiener Vorl.*

THE ARISTONOÖS KRATER (IN THE VATICAN).

time of the François vase, the cup by Oikopheles at Oxford,[1] and the famous vase of Aristonophos,[2] Ariston of Kos (ὁ Κῷος), Aristonothos, or Aristonoös as various scholars interpret the name.[3] The former, however, is somewhat archaistic in character, with careless rather than incompetent drawing, and hardly earlier than the sixth century; and the latter has been claimed with much probability as Ionian work, on account of the treatment of certain details, as well as on the ground of the name Ariston of Kos (if this interpretation be accepted).

FIG. 88. VASE FROM MYCENAE, WITH WARRIORS.

The inscription is not conclusive either way, and it may also be here remarked that the krater has several points of resemblance with the well-known "Warrior" vase of Mycenae (Fig. 88),[4]

[1] *Ashmolean Vases*, No. 189.

[2] In the Vatican (Helbig, i. p. 435, No. 641). Reinach, i. 179 = *Wiener Vorl.* 1888, 1, 8.

[3] For the interpretation of the inscription see *J.H.S.* x. p. 187 (Ramsay); *Arch.-epigr. Mitth. aus Oesterr.-Ungarn*, 1888, p. 85 (Dümmler); *Class. Review*, 1900, p. 264 (Richards). The last explanation (Aristonoös) seems the most natural. See Chapter XVII.

[4] Schliemann, *Mycenae*, p. 133: cf. Pottier in *Revue Arch.* xxviii. (1896), p. 19. The technique of the vase is not strictly Mycenaean, as the use of yellow colour for details implies.

which is probably later in date than the rest of the pottery from that site, being found outside the Acropolis. The Aristonoös vase (Plate XVI.) is usually dated in the seventh century, and is interesting for its subjects as well as for its artistic position. On one side is a sea-fight, a subject only common on Greek vases in the Geometrical period, and therefore obviously derived from that source; on the other, the blinding of Polyphemos by Odysseus, a subject popular in archaic vase-painting (see Chapter XIV.), and found in Cyrenaic and other early examples. At first sight this vase would certainly seem to be of the Proto-Attic class, showing the transition from Geometrical to developed Attic style; but the Mycenaean and Ionian elements must not be left out of consideration. As regards the Warrior vase, M. Pottier has given good grounds for showing that it also is to be reckoned as Proto-Attic. But we must not leave out of sight the view urged by Furtwaengler,[1] that the Aristonoös vase is of an Argive fabric. When the Heraion finds are published, they may afford more evidence on this point. Meanwhile, it may be remarked that the circumstances of the finding of the Warrior vase may support this view.

Closely connected with these early Attic fabrics is a very interesting series of small vases which, from the place of their discovery, are usually known as **Phaleron ware.** They are nearly all small jugs, and number some fifty, mostly at Athens, but there is a representative series in the British Museum. More conspicuously, perhaps, than the Proto-Attic, they illustrate the growing tendency to combine Geometrical and Oriental influences. In form and technique they are Geometrical, but in the ornamentation there is a large admixture of Oriental elements. It has been said that "the whole character of these vases seems to reflect an influence of the style of Oriental vases on painters accustomed to the Dipylon style,"[2] and it is largely in the arrangement of the decoration that the former is apparent, as well as in the introduction of new motives and patterns.[3] See for examples Plate XVII. figs. 2, 4, 5.

[1] *Berl. Phil. Woch.* 1895, p. 201.

[2] See *Jahrbuch*, 1887, p. 58.

[3] That they are an immediate development of the Dipylon style is indicated by various features of the later Attic Geometrical vases (*Jahrbuch*, 1886, pp. 98, 120).

The usual scheme consists of a panel with figures on the neck, a band of ornament round the shoulder, and below that parallel bands of lines or other ornaments, with zigzags or rays round the foot. A typical example is A 471 in the British Museum, with a cock on the neck, and below, dogs pursuing a hare.[1] On a cup of Geometrical form, with conventionalised plants and ground-ornaments of Geometrical character, are two deer fleeing from a lion, and there is also a pyxis with chariot-scenes obviously derived from Mycenaean vases. But most curious and interesting is a jug with two bearded heads and a woman with very small body, apparently playing flutes.[2] The general effect is quite unique, but the drawing is rude and childish to a degree; the middle head is almost Semitic in type. It would seem that here again we have a Mycenaean influence at work, and in general the appearance and style of these vases undoubtedly recall the figured vases from Cyprus.[3]

From *Ath. Mitth.* 1890.

FIG. 89. VASE OF PROTO-ATTIC TYPE FROM VOURVA.

Another series of vases in close relation to the Proto-Attic fabrics is that found at Vourva, near Marathon[4]; they are important as forming a connecting link with the next development of Attic vase-painting, the Tyrrhenian amphorae described at the conclusion of this chapter. They have been studied by Böhlau,[5] and more recently by Nilsson,[6] and these writers have

[1] *Jahrbuch*, 1887, p. 48, fig. 8 = Plate XVII. No. 5.

[2] *Jahrbuch*, 1887, p. 46.

[3] See p. 246; and cf. for example *Excavations in Cyprus*, p. 73, figs. 126-27. For a later Ionic vase of similar type see *Bull. de Corr. Hell.* 1884, pl. 7 (below, p. 339).

[4] *Ath. Mitth.* 1890, pls. 10-12; 1893, pl. 2.

[5] *Aus ion. u. ital. Nekrop.* p. 115 ff.

[6] *Jahrbuch*, 1903, p. 124 ff.

shown how they represent the influence of Ionic ideas, derived through Euboea. On the other hand the friezes of animals, which are so characteristic of this class, are clearly derived from Corinthian sources, but are distinguished from those on Corinthian vases by the absence of accessory colours. Fig. 89[1] may be taken as a typical example. They appear to be contemporary with the later Proto-Attic vases, such as the Burgon lebes, on which also traces of Ionic influence have been noted.

From the Geometrical period onwards the manufacture of painted vases seems to have been continued intermittently in **Boeotia** down to the fourth century. It would be taking too great a liberty with chronology to deal with all Boeotian fabrics here, and the later must fall into their place with the contemporary Attic fabrics. But there is a small class which seems to take its origin directly or indirectly from the Geometrical pottery; and as it belongs to a period anterior to the perfected B.F. style, it may be treated here as analogous in development to the Proto-Attic vases.

A favourite shape among the Boeotian Geometrical wares was that of a jug with long cylindrical neck and somewhat flat body, of a form clearly imitated from metal.[2] This shape, which is also often found in Proto-Corinthian fabrics (see below, p. 308), was utilised by a potter named Gamedes, whose signature is found on a vase from Tanagra in the Louvre,[3] in the Boeotian alphabet of about 600 B.C. It is decorated with the figure of a herdsman driving before him a bull and a flock of sheep, the figures being in black silhouette, with details indicated by white markings within incised lines. This is quite a local peculiarity,[4] and seems to be due to a combination of Corinthian and Ionian influences. Gamedes has also signed his name on an unpainted aryballos of the typical early Corinthian globular form (see p. 197) in the British Museum (Plate XVII. fig. 6), and a similar vase in the Louvre is signed

[1] *Ath. Mitth.* 1890, p. 10.

[2] Cf. *Bull. de Corr. Hell.* 1897, p. 446, and Plate XIX. fig. 5 (Corinthian).

[3] *Wiener Vorl.* 1888, pl. 1, figs. 2 and 7: cf. Berlin 1651 = *Bull. de Cor. Hell.* 1897, p. 448.

[4] It also occurs at Daphnae: see below, p. 352.

1

2

3

4

5

6

EARLY POTTERY FROM GREECE (BRITISH MUSEUM).

1, 3, "PROTO-CORINTHIAN"; 2, 4, 5, "PHALERON" WARE; 6, BOEOTIAN, SIGNED BY GAMEDES.

by Menaidas.[1] Yet another Boeotian potter, Theozotos, has a signed vase with a similar subject to the Gamedes jug, but the style is more advanced.[2]

Another typically Boeotian form found in the same period is a kantharos,[3] also obviously imitated from metal and decorated with figures of animals or palmette-and-lotos patterns of a peculiarly local type. The style of the animals is, like that of the Gamedes vase, also peculiar and local; but both in decoration and technique these vases seem to reflect Corinthian influence.

A small but remarkable class of vases, which seem to stand almost by themselves, is that known as the **Melian amphorae**. Four vases of this type now in the Athens Museum[4] were found in Melos many years ago, and were recognised as a separate class and described as "Melian vases" as long ago as 1862 by Conze.[5] Since that time a splendid example has been added to the list, found in the same island in 1893[6]; and to this must be added several fragments recognised at different times, including one from Naukratis in the British Museum.[7] All the complete vases are large amphorae, about three feet high, but of elegant proportions, with two handles branching out low down on the body. The figures are painted in brown on a pale yellow ground, and enhanced with dull red and purple accessories, some of the details also being incised. In two cases the subjects are mythological, one representing Apollo with his lyre in a chariot accompanied by Artemis and two Muses[8]; another the Asiatic Artemis (see Chapter XII.)[9]; another, the one found in 1893, has the subjects of Hermes and Athena, and Herakles carrying off Iole. Deities in chariots are a typical Melian subject. The figures are of quite original

[1] *Wiener Vorl.* 1889, pl. 1, fig. 1.

[2] Louvre F 69. For other signatures see Chapter XVII.

[3] *Bull. de Corr. Hell.* 1897, p. 450: cf. Athens 612 and a Berlin vase = *Anzeiger*, 1891, p. 116. On this shape see above, p. 187.

[4] *Cat.* 473-76. Plate XVIII. gives No. 474.

[5] *Melische Thongefässe.* See also Dumont-Pottier, i. p. 213; *Jahrbuch*, 1887, p. 211.

[6] Athens 477 = Mylonas in Ἐφ. Ἀρχ. 1894, pls. 12-4, p. 226 (admirably reproduced in colours).

[7] Cf. *Jahrbuch*, 1887, p. 212.

[8] Athens 475.

[9] Berlin 301 = Reinach, i. 380, 4.

design, in no way imitative, and the costumes seem to indicate a period between Homer and the sixth century. They may be roughly dated about the middle of the seventh.

They exhibit a combination of highly-developed Geometrical ornament with vegetable motives from the East and Mycenaean details, such as the spiral, which, as has already been noted (p. 294), attains almost to a rank growth over the vacant spaces of the vases. The human forms are conceived with a remarkable degree of freedom. In general appearance they are not unlike the large Proto-Attic amphorae, but much richer and freer in style; they may be also said to approach the finer Naukratite or Rhodian vases, such as the Euphorbos pinax with its quasi-Homeric subject and lavish use of ornament.[1]

The decoration is more advanced than that of the Proto-Attic class, the palmettes, for instance, being more freely treated. Riegl[2] notes that the palmettes and lotos-flowers are derived from Egypt, but transformed and Hellenised, and that the spirals are not Geometrical, but are naturalised into plants. The characteristic arrangement of the ornament in long vertical stripes he traces from Egypt through Mycenaean art; it develops later into the plait-band of the Clazomenae sarcophagi (Plate XXVII.). In brief, the ornament of the Melian vases forms a direct link between Mycenaean and Hellenic ornament.

An altogether new light has been thrown on this group by a large series of fragments of painted pottery found in 1898 in the island of Rheneia, which undoubtedly form part of the contents of graves brought over from Delos in 426-25 B.C., as recorded by Thucydides (iii. 104). They have been recently made the subject of careful study by Mr. J. H. Hopkinson,[3] who recognised them as belonging to the Melian class, and identified parts of at least ten distinct vases. The scanty preservation of fragments of complete vases is, in his opinion, due to the fact that they had been originally placed outside the tombs like the Dipylon vases. Like the complete examples, they are characterised by their fine slip and brilliant polychrome technique, the system of frieze-decoration with Geometric

[1] Cf. also *J.H.S.* viii. pl. 79 and B.M. A 762-64, 790.

[2] *Stilfragen*, p. 154.

[3] *J.H.S.* xxii. p. 46 ff.

MELIAN AMPHORA (ATHENS MUSEUM).

ornaments and spirals, the free and spirited drawing, and their purely plastic forms, showing no signs of imitation of metal. They also bear out the isolated character of this fabric, in which all the vases seem to be on the same level of excellence, without any signs of transition at either end.

Mr. Hopkinson draws the conclusion, in which he may prove to be justified, that this pottery is of Delian manufacture, but if so, that the clay must have been imported, as the local clay is, and always has been, too poor in character. At all events, the Cycladic origin of the fabric can hardly be a matter of doubt, and it is clear that the intermediate position of these islands would account for a combination of Geometrical and Ionian elements, so far as such exists. But the strongly individualistic character of the vases compels us to seek some other influence for their real origin, and it seems on the whole probable that they represent a separate and independent descent from Mycenaean pottery, starting with the spiral as the basis of ornamentation. Some evidence of this descent may be traced in the native pottery of Phylakopi, to which allusion has been made in the previous chapter (p. 263).[1]

§ 3. CORINTH

BIBLIOGRAPHY

Wilisch, *Altkorinthische Thonindustrie* (1892); Pottier, *Louvre Cat.* ii. p. 417 ff.; Dumont-Pottier, *Céramiques*, i. chaps. xi. and xvi.; Rayet and Collignon, p. 39 ff. For "Proto-Corinthian" pottery see references given in text.

As a commercial and artistic centre, no one city during the early archaic period entered into serious rivalry with Corinth, which was at a very remote date in relations with the East, and was one of the first of the Greek states to extend the system of colonisation in the Mediterranean, by the foundation of Corcyra, Syracuse, and other important outposts. The epoch of this supremacy and of its commercial prosperity extends from the eighth to the sixth century B.C., being coincident with the rule

[1] Cf. *J.H.S.* xxii. p. 66.

of the great tyrants, Periander, Kypselos, etc. In the course of the sixth century, when the Athenian tyranny rose to such a great height under Peisistratos, Corinth, with equal rapidity, sank to a subordinate position, and her artistic supremacy passed to the growing power of Athens. Hence it is fitting that Corinth and its famous potteries should be the subject of our next section.

Two causes contributed to the importance of Corinth as a centre of ceramic industry—the excellence of its clay (see p. 205), and its position as a commercial port at the junction of the Peloponnese and Central Greece. Pollux[1] selects Corinthian clay for commendation, and other writers speak of different varieties of pottery as Corinthian. Hence it is not surprising that large quantities of pottery should have been found here, the local origin of which is established by the inscriptions in the Corinthian alphabet which are frequently painted upon them; and not only that, but similar pottery has been found almost all over the Mediterranean, being more widely distributed than any other fabric except the Athenian B.F. and R.F. vases. The list of sites as given by Wilisch is as follows: Athens, Eleusis, Aegina, Argos, Kleonae, Tiryns, Mycenae, Thebes, and Tanagra in Greece; Euboea (Karystos), Melos, Corfu, Crete, Rhodes,[2] Samos, and Cyprus among the islands; Hissarlik, Smyrna, Pontus, and the Crimea; Alexandria, Naukratis, and Carthage; Syracuse and Selinus in Sicily, and Sardinia; and many places in Italy, such as Bari, Nola, Capua, Cumae, Beneventum, Cervetri, Vulci, Orvieto, Corneto, and Viterbo. M. Pottier thinks that this wide distribution is due, not to the merit of the vases themselves, which are often of poor style, but to the merchandise which they contained. This might, at any rate, account for the great preponderance of small oil-flasks, a form which took the place of the Mycenaean "false amphora."

The Corinthian vases are not, however, strictly homogeneous, and, in fact, fall into certain distinct categories. The earliest

[1] x. 182.

[2] On the relations of Corinthian and Rhodian pottery, see Wilisch, *Altkor. Thonindustrie*, p. 127. The Corinthian vases found in Rhodes are roughly contemporaneous with the so-called Rhodian fabric.

class found at Corinth stands quite by itself, and has been termed "Proto-Corinthian," though the justice of this title has been strongly combated by some scholars. On many of the Sicilian and Italian sites a class of small vases[1] is found which differs from the authentic Corinthian examples of the same forms, and may not impossibly denote local fabrics. If this is so, they would stand in the same relation to the genuine Corinthian as the Boeotian Geometrical vases to those of the Dipylon, forming a sort of supplementary fabric. At all events, such imitations of a popular ware might reasonably be expected.

M. Pottier maintains that five distinct varieties of clay may be observed, which partially serve as a basis for classification, apart from questions of style and ornamentation. They are as follows: (1) small vases of a greenish-yellow clay found in Greece, especially at Corinth, but rare in Italy; (2) vases of cream-coloured clay from Boeotia, and large kraters from Cervetri; (3) vases of reddish clay from Boeotia, Euboea, and Etruria; (4) vases of white and grey clay, very numerous in Italy; (5) vases of yellow clay, chiefly found in Italy. Some of the "Proto-Corinthian" wares belong to Class (1), but as a rule they are marked off from the rest by technique as well as decoration. This first class is without doubt exclusively local, and represents the *κέραμος Κορίνθιος* of Pollux; the same clay is even used at Corinth at the present day. On one of the Penteskuphia pinakes (see p. 316), the clay of which differs from the rest, a potter is represented making an aryballos of "Proto-Corinthian" form[2]; but the majority belong to the second class, which is also local, and includes the large kraters of advanced style with Corinthian inscriptions. In colour and porosity the clay resembles that of Boeotia. The red clay of Class (3) suggests a connection with Chalkis, a question which needs future consideration (see below, p. 321); (4) and (5) present analogies to the native clays of Italy, and include all the local imitative fabrics. The older varieties with merely

[1] *E.g.* Louvre E 460, 467; Berlin 1156 ff. Furtwaengler, Dümmler, and Wilisch call these Italo-Corinthian, but Böhlau regards them as Aeolic, Orsi and Gsell as Sicilian. See Pottier, *Louvre Cat.* ii. p. 422.

[2] *Gaz. Arch.* 1880, p. 106.

linear decoration are most largely found at Corinth and Syracuse, and the later with incised lines and figures of animals or men are comparatively rare. But as far as the present state of our knowledge permits, it is certainly possible to claim as Corinthian, at least in a sense, all the varieties of fabrics which have been hitherto mentioned, except probably the "Proto-Corinthian."

In describing these fabrics in detail, it will be found more convenient to ignore the technical differences, and adopt the more chronologically accurate system of classification which follows the development of the decoration. We thus obtain five distinct classes,[1] which may be summarised as follows:—

1. "Proto-Corinthian" wares (called by M. Pottier the Corinthian Geometric style). 750—650 B.C., and later.
2. Corinthian vases with incised scale-patterns or imbrications.
3. Corinthian vases with floral decoration, ground-ornaments, and figures not incised.
4. Similar vases, but with figures incised.

   [Classes 2 to 4 roughly cover the seventh century.]
5. Corinthian vases without ground-ornaments, and with large friezes of animals or human figures; incised details. 600—550 B.C.

1. Although the priority of the so-called **Proto-Corinthian** or Corinthian Geometrical pottery is certain, the term is, strictly speaking, applied to vases of different dates, which are only connected by form with the original fabrics.[2] The distinction lies in the fact that the earlier vases have linear decoration without purple accessories or incised lines, both of which occur in the more developed examples as the result of the revolution effected by the Corinthian painters.[3] They therefore fall into two main classes, of which the earlier includes the larger vases with purely Geometrical decoration of a simple type, doubtless reflecting the original local Geometrical pottery,

[1] Wilisch, *Altkor. Thonindustrie*, p. 6 ff., limits these classes to three: Proto-Corinthian, Yellow-ground, and Red-ground; he arrives at this by combining Classes 2, 3, and 4 in one.

[2] Cf. Couve in *Rev. Arch.* xxxii. (1898), p. 214.

[3] Cf. Pliny, *H.N.* xxxv. 16, of Aridikes and Telephanes, *spargentes lineas intus*. But it is not certain that this passage refers to the use of *incised* lines.

and sometimes with zones of animals. The figures are merely in black silhouette. In the later class the vases are small, sometimes diminutive, but of developed style, with zones of animals of the later Corinthian type, and with purple accessories and incised lines. The earlier class date from the eighth to the seventh century B.C.; the later cannot be older than the sixth. For the dating of the earlier group some evidence may be derived from the results of excavations at Syracuse, founded from Corinth in 735 B.C. In its earliest cemeteries, as also at Megara Hyblaea, numerous Proto-Corinthian vases of the earlier class have been found.[1] In Italy Proto-Corinthian wares were found in trench-tombs of about 750—650 B.C., and in the earlier chamber-tombs (see Chapter XVIII.). The older class disappears by the end of the seventh century, when the typical Corinthian *aryballos* (see p. 197) takes its place.

Besides Corinth and Syracuse, Proto-Corinthian vases have been found in considerable numbers at the Argive Heraion, at Thebes, and in the island of Aegina, and more rarely at Tiryns, Athens, Eleusis, Tanagra, Smyrna, and Hissarlik. Out of thirty in the Berlin Museum, eight certainly came from Corinth. Taking this into consideration, and also the Corinthian origin of Syracuse, it is evident that there is, apart from their style, a strong presumption in favour of their Corinthian origin.[2] As long ago, however, as 1877 Helbig cast doubts on this and proposed to locate them at the rival commercial centre of Chalkis.[3] He was followed by Dümmler, Klein, and others,[4] but recently Aegina[5] and Boeotia[6] have also been suggested, the latter at least for the earlier class. Yet more recently the pendulum has swung in another direction, that of Argos,[7] chiefly in view of the extensive finds at the Heraion (not yet published). Two specimens have recently been made known which bear inscriptions, but neither yields very definite

[1] *Ann. dell' Inst.* 1877, pls. C, D; *Mon. Antichi*, i. p. 780.

[2] *J.H.S.* xi. p. 173; Gsell, *Fouilles de Vulci*, p. 481.

[3] *Ann. dell' Inst.* 1877, p. 406; *Italiker in der Po-ebene*, p. 84.

[4] *Jahrbuch*, 1887, p. 18; Klein, *Euphronios*, p. 68; Wilisch, p. 11.

[5] *Ath. Mitth.* 1897, pp. 262, 265 ff.; and *Anzeiger*, 1893, p. 17.

[6] *Rev. Arch.* xxxii. (1898), p. 228.

[7] *Ath. Mitth.* 1897, p. 262; *Berl. Phil. Woch.* 1895, p. 202; *Amer. Journ. of Arch.* 1900, p. 441.

evidence. One is a signed vase (with the name of Pyrrhos [1]), in which the alphabet is mixed, but mainly Chalcidian in character; in the other [2] the inscriptions are fragmentary, but though the letter Σ appears in Argive, not Corinthian, form, the Λ is not of the peculiar Argive ⊦ type, but ⅄. The Pyrrhos inscription cannot be much later than 700 B.C., and thus ranks as the earliest known "signature." Mr. Hoppin,[3] arguing from the Heraion finds, regards the Proto-Corinthian fabrics as a direct offshoot of Mycenaean pottery, not as forming a link between the Geometrical and the Corinthian. The term, however, may be preserved, as implying priority in point of time, and it cannot be said as yet that the Corinthian theory is absolutely disproved.

The dominating form is that of the *alabastron* or lekythos, a pear-shaped vase with flat round lip and flat handle. The aryballos form is also known, as are the skyphos, pyxis, and a small krater. A characteristic shape is the jug with flat base rising in pyramidal form to a long cylindrical neck, with trefoil lip and handle.[4] The earlier group, although of "Corinthian" technique, usually have only "Geometrical" ornament, such as water-birds or simple patterns; hence they have been held, for instance, by M. Pottier, to represent the true type of Corinthian Geometrical pottery. But it does not seem that the Geometrical style was ever popular at Corinth, and there are many signs that the Proto-Corinthian fabrics were to a great extent influenced directly by Mycenaean wares. The patterns, which are in black monochrome, are on the smaller vases limited to bands, rows of dots, or a kind of "tongue"-pattern of stylised leaves. The Proto-Corinthian vases found in Aegina [5] form in some respects a class by themselves, being often of considerable size; they also include some unusual varieties, such as cups, and even amphorae.[6]

[1] *Rev. Arch.* xl. (1902), p. 41.

[2] *Ant. Denkm.* ii. pls. 44-5.

[3] *Amer. Journ.* loc. cit.

[4] It is interesting to note that this form quite disappears, and is not revived until the glass vessels of the Roman period. Cf. *J.H.S.* xi. p. 175: see also p. 300; and for this and the other shapes, Plates XVII., XIX.

[5] *Ath. Mitth.* 1897, p. 265 ff.

[6] In some specimens Ionian influence seems to manifest itself: cf. for instance the Ionic palmette in *Ath. Mitth.* 1897, p. 279. Studniczka notes that the purely monochrome outline drawing of the Aegina vases is like that ascribed by Pliny to the early Corinthian painters (*Ath. Mitth.* 1899, p. 376).

"PROTO-CORINTHIAN" AND EARLY CORINTHIAN VASES (BRITISH MUSEUM).

1-3, 5, EARLY CORINTHIAN; 4, 6, "PROTO-CORINTHIAN."

They usually have Geometrical decoration in the form of zigzags, maeander, chevrons, triangles, or parallel rays; on the larger ones are found friezes of animals, such as dogs pursuing deer, bulls, or water-fowl.

[Examples of this class are: B.M. A 487, 1050 ff. (see Plate XVII. figs. 4 and 6, XIX. fig. 1); Louvre E 13, 18, 32, 309, 375, 390, 396 (*Atlas*, pls. 39, 40); Berlin, 316-35; *Ann. dell' Inst.* 1877, pls. C, D, U, V; *Ath. Mitth.* 1897, pl. 7 (B.M. A 1530, of Aegina type).]

The second class is one of considerable interest. It consists of a series of miniature vases, of which some twenty in all are known, of the pear-shaped lekythos form, with minute but skilfully-executed figures in a very advanced style. At their head for beauty and delicacy of execution stands the exquisite little Macmillan lekythos in the British Museum,[1] a masterpiece of its kind. There is also a fine specimen in Berlin (No. 336), others in the Louvre[2] and the Syracuse Museum (the latter from the local excavations), and three very fine ones have recently been acquired by the Boston Museum.[3] But for size and richness, if not for beauty, all these are surpassed by a marvellous vase in the Chigi collection at Florence.[4] This is a jug or oinochoë, decorated with no less than four friezes, two of which are broad, with numerous figures, the two alternate forming narrow borders to these, with hunting scenes. The colouring is most remarkable, the figures being painted in black, yellow ochre, and bright crimson on a cream ground, with a lavish use of incised lines, and on the upper narrow frieze the animals are actually painted in pale buff on a black ground. The upper large frieze represents a combat, with serried ranks of warriors and horsemen advancing to meet each other, those on the right all having elaborate emblems on their shields (birds, ox-heads, Gorgon-heads, etc.). On the lower friezes the figures fall into groups: a four-horse chariot and a row of boys on horseback; a Sphinx; hunters slaying a lion; and lastly a

[1] Plate XVII. fig. 3=A 1050=*J.H.S.* xi. pls. 1, 2: cf. also *ibid.* p. 179.

[2] *Mélanges Perrot*, pl. 4, p. 269, and see p. 271, note 2; *Rev. Arch.* xxxii. (1898), p. 213.

[3] *Amer. Journ. of Arch.* 1900, pls. 4-6, p. 441.

[4] *Ant. Denkm.* ii. pls. 44-5.

fragmentary group, clearly representing the Judgment of Paris (see Chapter XIV.). It is the figures of this group which bear the inscriptions alluded to above. As an instance of the extreme richness and delicacy of the painting, attention should be called to the chariot-horses in the lower frieze, which are drawn slightly in advance of each other, and painted respectively yellow, black, red, and yellow.

The Macmillan lekythos, in spite of its diminutive size, is decorated with no less than three friezes of human figures and animals, as well as other ornaments ; the main design represents a combat of warriors ; the next, a race of boys on horseback ; the lowest, dogs pursuing a hare, and a crouching ape. The total height of the vase is barely $2\frac{3}{4}$ inches, and yet every detail in these friezes is marked with surprising care and accuracy, the shield-devices of the warriors, for instance, being drawn with wonderful minuteness. The three Boston vases are interesting for their subjects : on one is Bellerophon slaying the Chimaera ; on the next, a hero attacking a lion with a human head on its back (a monster no doubt *suggested by* the Chimaera) ; the third has the favourite early subject of Herakles' combat with the Centaurs. In all these vases the use of a red colour on the human figures should be noted, a technical device which we have already noted in the figures on the Melian amphorae (see above, p. 301).

It is abundantly clear that such work could not have been produced in the eighth, or even the seventh, century ; the style is virtually that of the subsequent black-figured vases, and we are therefore forced to the conclusion that these miniature vases were made under the more or less direct influence of the later Corinthian wares proper, at a time when that style was developing into the black-figured.

With the Proto-Corinthian ware may be linked a series of vases in the form of animals, human heads, etc., which imitate Oriental porcelain vases and show an early development of the plastic art which is remarkable for its advanced style (see pp. 127, 492). The decoration of these vases is usually of a simple Geometrical character. They are found in Rhodes and on many other sites, such as Eretria, Vulci, and Nola.

2. **Vases with incised imbrications.**—The importance of this class is betokened by the appearance of the incised line, which as a matter of pure technique is of course only a revival from the primitive fabrics, but as an adjunct to figure-decoration in order to express details is an entirely new feature (see above, p. 306, and below, p. 313). It was probably derived from metal-work, in which it had long been familiar, as the Boeotian Geometrical fibulae and the early Corinthian or Chalcidian bronze reliefs testify. Although destined largely to revolutionise design, it was at first used with restraint. In the vases under consideration it is confined to the imbrications[1] or scale-patterns with which the body is largely covered (Plate XIX. fig. 3). They were produced by means of a compass in which the graving-tool was fixed, the edge of each scale forming an arc of a circle, the centre points of which are usually visible. This scale-pattern is not a new feature in the decoration of vases; it appears in a painted form on many Mycenaean specimens,[2] and was also adopted by the Ionian painters of Daphnae in the Egyptian Delta (see p. 352). But as a more satisfactory result was obtained by incising, the Corinthian variety soon became exceedingly popular. The effect is often enhanced by the use of red colour.[3] In some cases this ornament is combined with painted friezes of animals (as in the Louvre vase E 421). The shapes employed are various, but a new and conspicuous variety is the large jug or *olpe*, with circular lip and large discs attached on either side to the tops of the handles. Attempts have been made to dissociate this fabric from Corinth, by attributing it to Rhodes, Ionia, and Sicily[4]; but although it is certainly true that large numbers were found in Rhodes and in Sicily, the claims of neither prevail over those of Corinth, and the most that can be said with any certainty is that some are local imitations. It is, moreover, possible to discover their prototypes in the Proto-Corinthian wares.

3. **Vases with floral decoration,** but no incised lines (about 700—650 B.C.).—Towards the end of the eighth century may be observed an influx of Oriental motives, transforming the

[1] So called from the imitation of overlapping roof-tiles (*imbrices*).

[2] *E.g.* B.M. A 193, 223; Louvre A 275.

[3] *E.g.* Louvre, *Atlas*, pl. 40, E 347.

[4] *Mon. Antichi*, iv. p. 271 ff.; Böhlau, *Ion. u. ital. Nekrop.* p. 91.

Corinthian style, just as at Athens it transformed the local style, producing the Phaleron ware. Its effect can also be observed in Etruria (Chapter XVIII.). It is largely due to historical causes, such as the development of Greek commerce and colonial expansion, and generally to the fusion of Dorian and Ionian elements. Hence the prominent characteristic which distinguishes the new variety from the Proto-Corinthian; namely, the employment of vegetable ornament, not from direct observation of nature, but conventionalised. These patterns seem to be largely drawn from Oriental textile embroideries, and mainly take the form of rosettes, leaves, and flowers strewn all over the field; according to some writers, this is the explanation of the phrase *spargentes lineas intus*,[1] used in connection with the Corinthian painters Aridikes and Telephanes. *Ground*-ornaments are almost unknown in Oriental art; but their adoption from the embroideries would only exemplify the principle, universal in early art, of imitating in one material the salient features of another. It has been suggested that these flowers and leaves are intended to represent the ground on which the animals are walking. If this is so, the effect is due to a principle already existing in Mycenaean art—the conventional rendering of perspective by placing objects whose real position is beyond the principal subjects in the same vertical plane with them. Another favourite pattern, either as a ground-ornament or as part of the subordinate decoration, is a combination of the palmette and lotos-flower, picked out with purple accessories[2]; this pattern is purely conventional, and often assumes colossal dimensions in relation to the size of the vase. The purple accessories, which now become very common, may possibly be connected with another traditional Corinthian invention, that of Ekphantos, who used a red pigment made from pounded earth (see p. 395).[3]

As regards shapes, the alabastron and aryballos[4] are pre-

[1] Pliny, *H.N.* xxxv. 16. See p. 306, note 3.

[2] Cf. Louvre E 350 ff.

[3] Studniczka (*Jahrbuch*, 1887, p. 151) connects Ekphantos with Melos (cf. the inscription in Roberts, *Gk. Epigraphy*, i. p. 32). On the connection of Corinth with Melos, see Wilisch, p. 123 ff.

[4] The aryballos is also found in early Boeotian fabrics (subsequent to the Geometrical period): cf. the Gamedes vase in the B.M. (p. 300.), and that of Menaidas in the Louvre.

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1. COVERED JAR OF CORINTHIAN FABRIC.
2. "RHODIAN" OINOCHOE.

(BRITISH MUSEUM).

eminently popular; the flat-bottomed jug, the pyxis or covered jar, and the skyphos or kotyle, are also found (see Plate XIX. figs. 1, 2, 5). There arises now a tendency in the larger vases to divide the body into zones or friezes, which henceforth become a characteristic feature. The subjects are strictly limited to animals such as the lion, or various types of birds; and friezes of running dogs and other quadrupeds now become the typical Corinthian motive.

4. **Vases with floral decoration and figures with incised lines** (about 650—600 B.C.).—In this next stage, the date of which corresponds with the later trench-tombs and older chamber-tombs of Etruria (see Chapter XVIII.), there is a marked tendency of the vases to increase in size, and several new forms are either introduced for the first time or increase in popularity. Besides the ever-popular aryballos and alabastron, there are various forms of covered jars, the cylindrical pyxis, and the so-called *lekane*, a sort of tureen; also various drinking-cups, the kotyle, the so-called *kothon*, and the kylix, the last a new type. Its prototype is perhaps to be sought in the shallow four-handled bowls of the Boeotian Geometrical ware, and it is marked by its bent-over rim and low foot.[1]

The decoration loses all restraint, and the prevailing idea with the artist is the *horror vacui* which impels him to fill up every vacant part of the surface, at the expense of utterly conventionalising his figures and ornaments and distorting their forms (cf. Plate XIX. figs. 1, 5, and XX. fig. 1). The vases contrast unfavourably with their Ionian contemporaries, in which, however profuse the ground-ornaments, the importance of the figures is never lost sight of, and they never fail to strike the eye. Incised lines and purple accessories are employed freely, and even the rosettes are always marked by cross-wise incisions.

Incision as a method of ornamenting vases was of course always known from the earliest times, but it was not until now employed within and round painted designs. Hitherto the only alternatives were plain silhouettes (as in Geometrical vases) or half-opaque, half-outlined figures (as in Mycenaean and some

[1] See Wilisch, p. 24; examples in Athens Mus., Nos. 621, 622, 640 ff.

early Ionian vases). The former, however, were too conventional, the latter too elaborate, and the new method of painting *plus* engraving reconciled the two, being at once more realistic and more rapid. It is generally supposed that this method was a Corinthian invention (compare its use in the imbricated vases, p. 311), but it is not unknown in early Attic vases, and Böhlau attributes its origin to an early Ionian tendency to imitate metal ware.[1] But this was an anomaly, and the Ionians never took to the incising method, preferring outline designs or inner lines of white paint (see p. 331). In any case the Corinthians were the first to adopt it and popularise it.

The subjects, which now begin to present greater interest, include all kinds of animals and monsters, arranged in friezes, and by degrees human figures, and even scenes from mythology, make their appearance. Some vases have only decorative ornament, such as a flower of four long, pointed petals, which is frequently found on the aryballi.[2] The animals include the lion, panther, boar, bull, ram, deer, goat, swan, and eagle; the monsters are Gryphons, Sphinxes, or Sirens, and a sea-deity of which the upper part is human (both male and female), the lower is in the form of a sinuous fish-tail, and the figure is often winged in addition.[3] It is possible that in these figures we may see the local sea-deities Palaemon and Ino-Leukothea. The human figures are either single, ranged in friezes, or in groups; the favourite types are combats of two warriors and Bacchanalian dances; hunting scenes; and warriors setting out in chariots. The mythological scenes include the combat of Herakles with the Centaurs,[4] and scenes from the Trojan War, such as the combat of Ajax and Aeneas, or the episode of Dolon.[5]

So far, then, in the three groups of Corinthian fabrics proper,

[1] Pottier, *Louvre Cat.* ii. p. 437 ff.; but see *Ath. Mitth.* 1895, p. 125, and Böhlau, *Ion. u. ital. Nekrop.* p. 98.

[2] *E.g.* Athens Mus. 502 and 507; Berlin 1034 ff.; *J.H.S.* xii. p. 312 (from Cyprus); and cf. Wilisch, p. 41.

[3] See *Él. Cér.* iii. 31-32 B, etc., and Chapter XII.

[4] *J.H.S.* i. pl. 1.

[5] Louvre E 600; Wilisch, figs. 47-9. In some of these the inscribed names may be purely fanciful. The Corinthian potters were particularly fond of idealising ordinary scenes in this way. Cf. for Trojan scenes Chapter XIV. and *Hermes*, 1901, p. 388.

we are able to trace the working of M. Pottier's law of the *hiérarchie des genres*,[1] the law which was made by M. Dumont the basis of his work *Les Céramiques de Grèce propre* (vol. i., dealing with the earlier fabrics). According to this law, the decoration of vases advances by a logical process from linear patterns to floral ornament, and then from animals to human, and finally mythological, figures. Another feature in this group is that inscriptions now appear for the first time. They became exceedingly popular at Corinth, and on most of the vases with figure-subjects they may be found, each person bearing a name, whether the scene is mythological or not.[2] The fashion seems to have received an impetus from the chest of Kypselos, which was largely a Corinthian work, and often shows close parallel with the vases (see below). We have a signed vase with figures in this style by Chares (Louvre E 609), and others by Timonidas (Athens 620), and Milonidas (a pinax in Louvre).[3] The abundance of these inscriptions has done much to increase our knowledge of the somewhat peculiar Corinthian alphabet (see Chapter XVII.).

Among the vases of this period one of the most remarkable is the so-called Dodwell vase in Munich (Fig. 90),[4] found at Mertese, near Corinth, about the year 1800, and purchased by the explorer Dodwell. It is a cylindrical jar or box (*pyxis*), with cover, decorated round the sides and on the top. Round the body are two friezes of animals, with numerous flowers as ground-ornaments; on the top of the cover is a frieze representing a boar-hunt, in which eight fancifully-named personages take more or less active part. Of these Philon lies dead under the boar's feet; Thersandros attacks it with a sword in front, and Pakon discharges an arrow at it from behind. Behind him Andrytas hurls a spear, and he is followed by four inactive figures, all draped and unarmed—Dorimachos, Sakis, Alka . . . and Agamemnon. The scene is closed by a heraldic group of two Sphinxes. It will be observed that

[1] See above, pp. 245, 284.

[2] Cf. the Dodwell pyxis described below.

[3] Cf. also the aryballos of Ainetas, B.M. A 1080 = *Ann. dell' Inst.* 1862, pl. A, and the series of pinakes described below.

[4] *Cat.* 211; Dodwell, *Tour*, ii. p. 197; Baumeister, iii. pl. 88, fig. 2046.

here, as in other contemporary scenes with human figures, the ground-ornaments are already showing a tendency to die out; perhaps under the influence of Ionia, where it was soon discovered that they interfered with the effect of figures in action. The alphabet of the inscriptions enables us to date this vase about 650—620 B.C.

FIG. 90. THE DODWELL PYXIS (COVER).

The *pinakes*, or votive tablets, from Penteskuphia, of which mention has been made elsewhere (p. 51), form an important feature in this group, both from their subjects, their inscriptions, and the method of painting. They appear to range in date from 650 to 550 B.C., and fall into three classes in point of style. The earliest have designs in rude silhouette without incised lines; in the second only the contours of the figures are

1 2

1, Imitation Corinthian Krater, Return of Hephaistos; 2, Corinthian Krater with Boar-hunt (British Museum).

incised; the third are like the vases, with incised lines and purple details. In a few cases the clay is red, not drab-coloured. Some are decorated on both sides, but the majority on one only, and they were clearly intended for hanging up in a temple. Two of them are signed by artists, Timonidas and Milonidas,[1] and there are other interesting inscriptions, besides the ordinary dedications to Poseidon and Amphitrite (see Chapter XVII.). The subjects are partly the same as on the vases, but the majority fall under two heads: (*a*) Poseidon and Amphitrite, standing or in a chariot (Fig. 115); (*b*) *genre* scenes from Corinthian industries, such as miners digging out clay, potters and painters at work, and vessels exporting pottery over the sea (cf. pp. 207, 216, and Chapter XV. § 5). Of the subjects common to the vases, Oriental animal-types and horses occur most frequently; also rosettes and floral ground-ornaments.

5. The vases of the fifth class (600—550 B.C.) are characterised by the prevalence of **human and mythological subjects,** with large friezes of animals, a general use of incised lines, and an absence of ground-ornaments. They are mostly of considerable size, but small vases still continued to be made during the sixth century, as is seen in the "Proto-Corinthian" lekythi. The amphora and hydria now first make their appearance; the later lekythi approach more to the Attic form.[2] One or two other typical shapes may also be noticed, such as the column-handled krater (Plate XXI.) and the trefoil-mouthed jug with a panel on one side of the vase only; the prototype of the former we have seen in the krater of Aristonoös. Another important feature is the general use of a red ground in the place of the old creamy white; and yet another, the use of white accessories, especially for the flesh of female figures. It should be noted that this white is always applied directly on the clay, as in Ionian fabrics, not as in the Attic, upon the black varnish. We may bear in mind that it was about this time that the Athenian Eumaros *marem a femina discrevit*, according to Pliny; but his date is uncertain, and the bearing of this invention on the vase-paintings is not to be accepted without hesitation. For the faces of male figures purple is often used, and, generally

[1] *Wiener Vorl.* 1888, pl. 1.

[2] Cf. B.M. B 30 and B 586.

speaking, the vases tend to present a polychrome appearance. This again is an Ionian characteristic.

The subjects now take a much wider range, and include almost every variety known in the earlier part of the sixth century. Friezes of animals seldom form the main motive of decoration, but are placed in subordination either on the shoulder or low down on the body. Some of the older types still linger, such as the monsters and fish-tailed sea-deities, and also that of a heraldic group of two animals with a palmette and lotos pattern between, suggesting the old Assyrian motive of two animals guarding the sacred tree. Generally, there is a great advance in composition; but two traditional principles are still observed—the juxtaposition of figures turned in the same direction, as in Oriental compositions, and a symmetrical disposition of the two sides converging to a centre, a "Continental" principle already seen in the Dipylon vases. The subjects taken from daily life include combats, banquets, Bacchic or grotesque dances, hunting-scenes, warriors setting out for battle, and processions. Some appear now for the first time, as, for instance, the banquets. Among the mythological scenes, Herakles and his adventures find most favour; scenes from the Trojan cycle are far from uncommon; and other myths of more isolated character are those of Amphiaraos, Perseus, and the Theban cycle (Tydeus killing Ismene). Many of the mythological scenes are really only *genre* scenes with names added; for instance, the krater in the Louvre with Herakles' reception by Eurytos (E 635), is only an ordinary banquet-scene in composition, but for the inscriptions; and so with many others, as we have also observed in the preceding class.

It may suffice to describe one vase in detail as typical of the later Corinthian wares. This is the so-called Amphiaraos krater in Berlin,[1] a column-handled krater of considerable size and very richly decorated. It belongs to a series exceptionally well represented in the Louvre (E 613-39; all found, like this, at Cervetri), and illustrating the absolutely latest development of Corinthian pictorial art. Its special interest is that it affords a close comparison in several points with

[1] *Cat.* 1655 = *Wiener Vorl.* 1889, pl. 10 = Reinach, *Répertoire*, i. p. 199.

the chest of Kypselos. The subjects are disposed in two rows all round the vase, of which the upper is the more important, containing two mythological subjects. These, which are unequally divided, one occupying more of the circumference than the other, are the Departure of Amphiaraos and the Funeral Games for Pelias,[1] the *ἀγὼν ὁ ἐπὶ Πελίᾳ* of Pausanias.[2] On the lower frieze are seven boys taking part in a horse-race, seven groups of combatants, and two marching hoplites. It will be noted that there is no frieze of animals.

The Amphiaraos scene depicts that hero in the act of ascending his war-chariot, in which the driver Baton stands; he turns to look at his family behind, consisting of two daughters, a son, and an infant in the nurse's arms, and last of all his wife Eriphyle, who stands in the rear with the pearl necklace, the price of her treachery. Her children seem to be supplicating for her. In the background Amphiaraos' house is indicated by a Doric building. The correspondence of this scene with the description of the Kypselos chest[3] is extraordinary; the latter might almost be a description of the vase. An interesting feature of this painting is formed by the animals which are scattered over the scene: a hare, a hedgehog, an owl and another bird, a serpent, a scorpion, and a lizard or salamander.[4]

The funeral games for Pelias adjoined the Amphiaraos scene on the chest, just as they do here, except that the scene on the vase is only an excerpt from the contest of the Pentathlon, which is there complete. We have here only the wrestling (by Peleus and Hippalkimos), and in place of the other scenes a chariot-race, with the judges waiting to decide the result; as on the chest, tripods are standing ready as prizes for the victor. It must not, of course, be supposed that these scenes are directly copied from the chest—the discrepancies are too great, although the parallels are very interesting; but the only object of such comparisons is to assist us to an idea of the appearance of these great contemporary works of art.[5]

[1] See Chapter XIV.
[2] v. 17, 9.
[3] Paus. v. 17-19.
[4] Cf. the Arkesilas vase described below, p. 342.
[5] See on this subject H. S. Jones in *J.H.S.* xiv. p. 30 ff.

One of the chief features of this class is the almost total disappearance of the ground-ornaments. Sometimes indeed a frieze of animals with the old profusion of rosettes is combined on the same vase with a design of figures on a clear field; but, generally speaking, rosettes are not found with the figure subjects. Their place is almost supplied by the inscriptions, which become more and more extensively employed, even for animals. Accessory colours are used in a purely conventional fashion, not to reproduce nature, but —probably—to reproduce metal-work. Thus we may surmise that white is intended to give the effect of silver (or ivory) and red that of copper (or gold), just as such substances were used on the chest of Kypselos in order to give variety and picturesqueness to the surface. The black then represents the ground of bronze or wood.

The sixth-century Corinthian vase-paintings have a special importance at the present day, because they are almost the only remnant left to us of the artistic products of the city at that time.[1] Though not of course to be reckoned as examples of the higher art, they yet reflect it in some measure, and help us to reconstruct such works as the chest of Kypselos, almost every subject on which finds a parallel in the Corinthian vases. And it is possible that they are important in another respect. We know from Pliny that there was a very influential school of painting centred at Corinth in this century, which is represented by the names of Kleanthes and Aridikes, Ekphantos, Aregon, and perhaps also Kimon of Kleonae. Although Professor Robert[2] has endeavoured to show that the traditions are untrustworthy, and places Kimon in the seventh century, Kleanthes later, the probability is that they may fairly be upheld, and Pliny's dates accepted. Allusion has already been made to the inventions traditionally associated with Aridikes and Ekphantos; but Kimon belongs to a later development of painting altogether, and must be reserved for a later chapter. Of Kleanthes it is only stated that he "invented linear drawing," whatever that may mean; Pliny, our informant, was perhaps

[1] Cf. the Thermon metopes (p. 92).

[2] *Arch. Märchen*, p. 121: see p. 395 ff.

CHALCIDIAN VASE: HERAKLES AND GERYON; QUADRIGA (BIBLIOTHÈQUE NATIONALE).

hardly aware himself, and is no more definite as to the period at which he lived. We can only, therefore, assume that he marks the epoch of some new departure or advance in contour or outline drawing.[1]

There are a few vases which, on account of various peculiarities, can only be described as "imitation Corinthian." Among these may be mentioned one with an inscription in the Sicyonian alphabet (Berlin 1147), and a krater in the British Museum (B 42 on Plate XXI.) with designs on a white ground, which from the similarity of its style to the Berlin vase may be linked therewith.[2] The late F. Dümmler was of opinion that these two vases were made at Sikyon. There is also the group of vases from Caere in the Campana collection of the Louvre, which have usually been regarded as imitations of Corinthian ware made in Italy; but M. Pottier in his catalogue makes no distinction between these and the genuine Corinthian fabrics.

§ 4. CHALCIDIAN VASES

A very puzzling class of vases, about which little is at present known, is that formed by the so-called Chalcidian group. They are so named from the fact of their bearing inscriptions which may undoubtedly be referred to the alphabet of Chalkis in Eretria; but there is no evidence that they were actually made there. We know, however, that Chalkis was a great art-centre and rival of Corinth in the seventh and sixth centuries, and was especially famous for work in metal. As, therefore, more than one of these vases bears evident indications, in the shape of the handles, the ornamentation, and other details, of an imitation of metallic originals, there may be some ground for the attribution. Only a dozen or so of these vases with Chalcidian inscriptions are known, and several of them are in character almost to be ranked with the developed B.F. Attic wares; their date cannot therefore be earlier

[1] See on the achievements of the early Greek painters as described by Pliny, Jex-Blake and Sellers, *Pliny's Chapters on Greek Art*, p. xxviii.

[2] But see *Ath. Mitth.* 1894, p. 510, and *J.H.S.* xviii. p. 287, note. The other vases classified in the Museum Catalogue as imitations (B 43-6, 49-53) are more probably of Ionic or quasi-Ionic fabric. Athens 655 is in style not unlike B.M. B 42.

than the middle of the sixth century, probably about 560—540 B.C. On the other hand, they often present a close parallel, especially in the ornamental patterns, to the later Corinthian wares,[1] whence it seems probable that they form, like the so-called Tyrrhenian amphorae (see below), a connecting-link between Corinth and Athens. While as yet it is impossible to obtain a definite idea of the characteristics of "Chalcidian" vases, the attempt to classify other uninscribed vases with them can only be very tentative, although there is more than one in the British Museum, in the Louvre, and elsewhere, which presents some feature especially typical of the inscribed examples.[2]

The prevailing shape is the amphora, all but one of the inscribed group coming under this heading, in which the outline of the body approaches nearer to a pure ellipse than is usual in this form; the typical ornaments are rows of oblique zigzags and a peculiar variety of the lotos-pattern. An occasional rosette in the field preserves a trace of Corinthian influence. The subjects are mainly mythological, such as the combat of Herakles and Geryon, battle-scenes from the Trojan legends, etc.; and two points are worth noting as apparently characteristic of the group: (1) the tendency to represent fallen figures in full face, which is very rare in archaic vase-painting; (2) the type of Geryon, who is winged, and not, as in the Attic vases, "three men joined together," as Pausanias describes the figure on the chest of Kypselos, but a triple-headed, six-armed monster.

The most typical example of the class is the amphora in the Hope collection at Deepdene,[3] with scenes from the Trojan War. Ajax stands over the body of Achilles, defending it from the attacks of Glaukos, whom he has wounded, and of Paris, who has just discharged his bow; behind the latter advance Aeneas and two other Trojans with spears, while a fourth falls back wounded. Achilles and the two

[1] See Wilisch, *Altkor. Thonindustrie*, p. 133 ff.

[2] Furtwaengler, *Gr. Vasenm.* p. 161, points out that the Chalcidian fabrics are not like those of Corinth and Athens, exhibiting growth and development, but a small group coming from one workshop.

[3] *Mon. dell' Inst.* i. 51 = Reinach, i. 82.

wounded men are all shown in full face.[1] The combat is watched by a stiff archaic figure of Athena, with serpent-fringed aegis, and behind her, standing apart, is Diomede, having his wounded hand bound up by Sthenelos. The drawing on the whole is accurate, and the style more vigorous and less conventional than that of the Attic vases.

Two of the group represent Herakles encountering Geryon: an amphora in the British Museum (B 155) and one in the Bibliothèque at Paris (202). In the latter the figure of Athena is almost exactly repeated from the Deepdene vase, and behind her is a group of cattle. The reverse of this vase represents a quadriga seen from the front (a typical Chalcidian subject). Both sides of the vase are illustrated in Plate XXII.

Until the whole series of Chalcidian vases is properly studied and estimated,[2] it is difficult to give an adequate account of this important group; we append, however, a list of those bearing inscriptions in the alphabet, and a few others for various reasons associated with them.[3]

[1] It is curious that the Chalcidian artists only attempted this novelty in the case of helmeted warriors.

[2] A publication by Loeschcke is in preparation (1904). See also Furtwaengler's remarks on this group (to which he adds some examples) in *Gr. Vasenmalerei*, p. 161. For the inscriptions see Chapter XVII.

[3] The list in Klein's *Euphronios*, p. 65, is as follows:—

(1) *Mon. dell' Inst.* i. 51 (Deepdene): Combat over body of Achilles.

(2) Gerhard, *A.V.* 105-6 = Reinach, ii. 58, 253 (Bibl. Nat. 202): Geryon; quadriga (Plate XXII.).

(3) B.M. B 155: Geryon; Perseus and Nymphs.

(4) Gerhard, *A.V.* 190-91 = Reinach, ii. 95 (Bibl. Nat. 203): Warriors arming.

(5) *Ibid.* 322 = Reinach, ii. 160 (Wurzburg 315): Departure of Hector.

(6) *Ann. dell' Inst.* 1839, plate P = Reinach, i. 259 (Kopenhagen 64). Skyphos: Tydeus and Adrastos.

(7) Leiden 1626 (Reinach, ii. 268): Sileni and Maenads.

(8) Durand Coll. 145

(9) Gerhard, *A.V.* 237 = Reinach, ii. 120 (Munich 125). Hydria: Zeus and Typhon; Peleus and Atalanta.

(10) *Bull. dell' Inst.* 1870, p. 187, No. 32 (in Florence).

(11) Gerhard, *A.V.* 95-6 = Reinach, ii. 53: Contests of Herakles with hydra and Amazons.

To these may be added (12, 13) B.M. B 75 and B 76 (both inscribed); (14) Munich 1108; (15) Vienna 219; (16) *Jahrbuch*, ii. (1887), p. 154, note 82; (17) B.M. B 154 (inscriptions Attic, but style resembling No. 1); (18) Gerhard, *A.V.* 205, 3-4 = Reinach, ii. 105, 2 (inscriptions Ionic, but style Chalcidian); (19) Kopenhagen 115 = Daremberg and Saglio, i. p. 821, fig. 1026; (20) *Arch. Anzeiger*, 1889, p. 91 (in Berlin); also Louvre E 793-813 (according to Pottier). See on the subject generally Pottier, *Louvre Cat.* ii. p. 551, and for the inscriptions, Kretschmer, *Gr. Vaseninschr.* p. 62.

§ 5. "TYRRHENIAN AMPHORAE"

There is a large and important class of vases, not differing in technique from the Attic B.F. vases proper, yet clearly of earlier date, and while not exclusively Attic in all their characteristics, yet sufficiently so to suggest that they are closely connected therewith. The problem which these vases have for a long time presented is whether they merely represent an early stage of the Attic B.F. fabrics, linking them to the "Proto-Attic," or whether they owe their origin to foreign, *e.g.* Corinthian, sources.

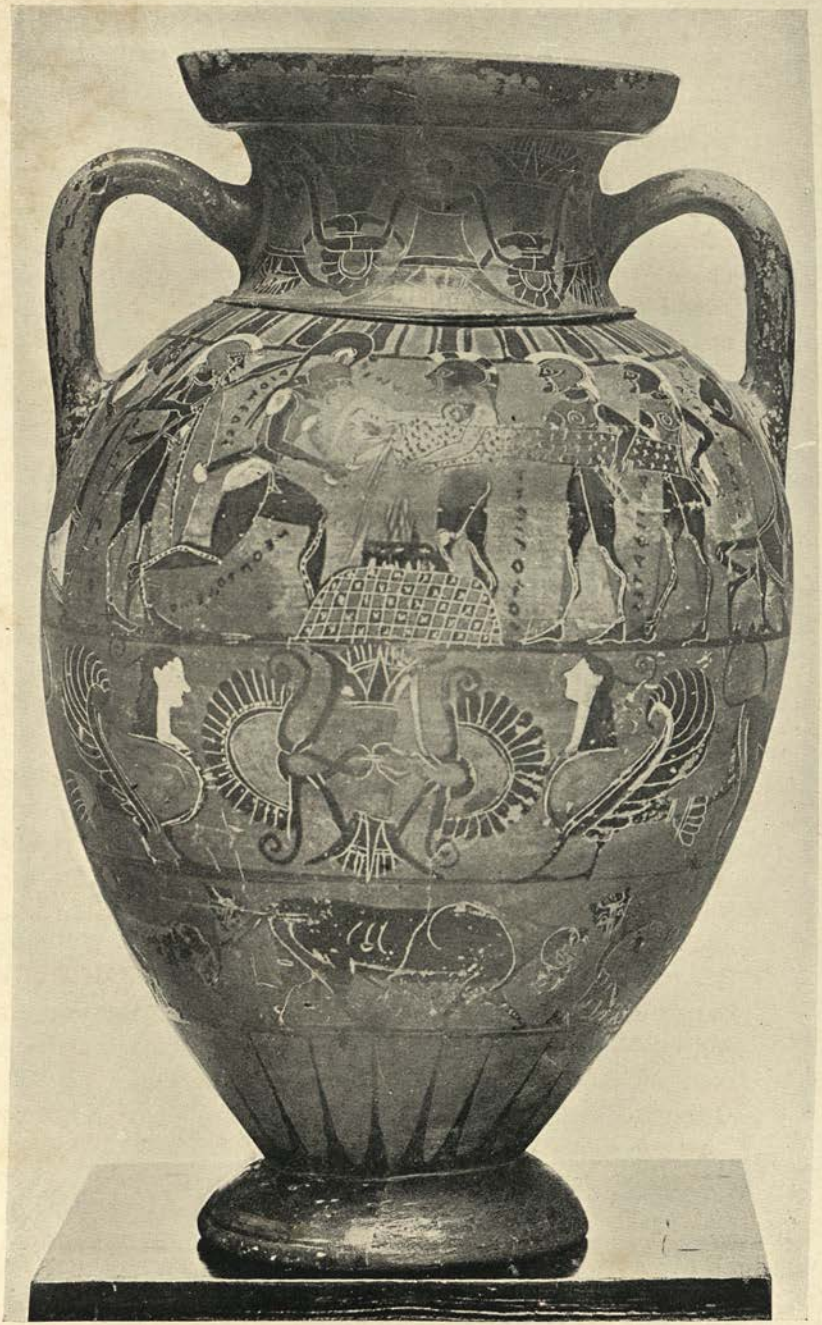
About eighty vases, nearly all amphorae, have been recognised as presenting the characteristics of this class, and all have been found in Italy, chiefly at Cervetri and Vulci; hence they have been known for many years. As long ago as 1830 the name "Tyrrhenian amphorae" was applied to them by Gerhard, meaning thereby a sort of cross between Greek vases proper and those of obviously Italian origin. The name has adhered to them, and was also used generally to describe the characteristic form of amphora, with its cylindrical neck and egg-shaped body[1]; but it was not long before it began to be realised that the vases bore inscriptions in the Attic dialect, and, further, that the subjects on them had much in common with the later Corinthian fabrics. Thereupon sprang up the idea, fostered by Loeschcke,[2] that the vases were made by Athenian potters, but that they were largely indebted to Corinthian—or, as Loeschcke called them, Peloponnesian—prototypes.[3] For the last ten years or so they have been generally known as "Corintho-Attic," but Thiersch, the most recent writer on the subject,[4] reverts to the old name of Tyrrhenian, using it of course in a purely conventional sense. His conclusion is that the class is to be regarded as "old Attic," rather than imitative of Corinthian, and he shows clearly that it must be regarded as a development of the Vourva vases (p. 299), as will be seen from an

[1] For a description of the shape of this particular kind of amphora, see p. 160.

[2] *Arch. Zeit.* 1876, p. 108.

[3] On the relation of Attic vases to Corinthian, see Wilisch, *Altkor. Thonindustrie*, p. 137.

[4] *Tyrrhen. Amphoren* (1898).



"TYRRHENIAN" AMPHORA: DEATH OF POLYXENA (BRIT. MUS.).

examination of the vase given in Fig. 89, p. 299; but that it is entirely free from Corinthian influence can hardly be maintained. We have seen that the Vourva class borrowed from Corinth the friezes of animals which are also characteristic of this group, and it is possible that this influence continued to make itself felt. At all events, this ware belongs to the first half of the sixth century B.C., and stands in close relation to the François vase, and others which represent the earliest school of Attic B.F. artists. Its specially Attic characteristic are, according to Holwerda, (1) the inscriptions, (2) the clay, (3) the types of the lotos and other ornaments, (4) the importance given to one subject, (5) the thin proportions of the figures.[1]

The vases are for the most part decorated in the same manner, with an elaborate lotos-and-honeysuckle pattern on either side of the neck, and several friezes of figures, usually three, covering the body, of which all but the principal one are composed of animals or monsters. The principal frieze is always the upper one, covering the body from the neck to the middle. The friezes are more numerous on the earlier examples; they become fewer as Corinthian characteristics give way to Attic. Altogether, these vases are remarkably homogeneous, both in style, in shape, and in technique, and it has even been suggested that the whole series is the work of one man; nor is this an impossibility.

An interesting feature is formed by the inscriptions,[2] which are of frequent occurrence. They tend, however, to degenerate into meaningless collocations of letters, which some have thought to represent Corinthian inscriptions misunderstood; but the alphabet is pure Attic throughout, except for the double forms on the Berlin amphora (see below), and a Chalcidian < for Γ on a vase in the British Museum. The artist is fond of giving his figures surnames, and thus we find Hermes styled *Κυλλήνιος*, "of Kyllene," Nestor *Πύλιος*, "of Pylos," and Ajax [*Ὀ*]*ϊλιάδης*, "son of Oileus," a feature which hardly occurs on any other class of vases. The meaningless inscriptions are not easy to account for; certain groups of letters are repeated

[1] *Jahrbuch*, 1890, p. 237 ff.; Pottier, *Louvre Cat.* ii. p. 564.

[2] See Chapter XVII.

over and over again, and it has been suggested by Thiersch that they are analogous to the friezes of animals, with their repetitions and combinations. They also seem to serve a decorative purpose by filling up spaces.

The subjects are mainly mythological, with many features of interest. For several the artist seems to have had a decided preference, such as the combats of Herakles with Amazons and with the Centaur Nessos, that of the Lapiths with the Centaurs, the adventure of Troilos and Polyxena from the Trojan legends. Bacchic scenes are altogether wanting, but on many examples a Corinthian type is adopted in their place, representing grotesque dancing figures in various attitudes.[1] Of scenes from daily life, combats of armed warriors and young riders galloping prevail above all others; the latter are, as on the Caeretan hydriae (p. 355), little more than decorative. Generally speaking, it is doubtful if Loeschcke's idea of types borrowed from the Peloponnese can be maintained; it is true that some scenes which occur on the chest of Kypselos may be found, but the treatment is not quite the same; and some subjects seem to be rather from an Ionic source. The animals or monsters which form the subordinate friezes include the Sphinx and Siren; the lion, panther, goat, and deer; the eagle, swan, and cock.[2]

Some of the vases call for more than passing mention, especially the remarkable Berlin vase (*Cat.* 1704) with the Birth of Athena, and the richly decorated specimen recently acquired by the British Museum, with the Death of Polyxena. The former seems to be the earliest example of its subject, and in the number and arrangement of the figures it resembles the fine early Attic amphora in the British Museum (B 147). Its chief interest is epigraphical, in the use of the double forms (Corinthian and Attic) in the same word of the letters E (Ⅎ) and K (Ϙ).[3] Over the figure of Hermes is written Ἑρμῆς εἰμὶ Κρυέλνιος (*sc.* Κυλλήνιος), as already noted above. This vase may be

[1] See *J.H.S.* xviii. p. 287. The dance is that known as the κόρδαξ.

[2] On the ornamental patterns typical of this group, see Thiersch, *Tyrrhen. Amphoren*, p. 69 ff.

[3] Cf. the ΞΔΕVϟ (Ζδεύς), on E 852 in the Louvre; and see Chapter XVII.

regarded as having established the "type" for the subject so long popular on Attic vases, until Pheidias created a new and more ideal version.[1] The Museum vase (Plate XXIII.) has a very remarkable representation of a subject rare in Greek art, with several unique features.[2] The body of Polyxena is carried in a rigid horizontal position by Ajax Iliades (*sc.* son of Oïleus) and two others, to the tomb of Achilles, over which Neoptolemos stands to perform the fatal deed. Phoenix, Diomede, and Nestor "of Pylos" are spectators of the act.

The style of the vases as a whole is coarse and clumsy, though it often rises to a greater standard of merit; the lines are often mechanically drawn and lifeless, which may be to some extent the result of imitation. Details of drapery are seldom shown, except that the dresses are often richly decorated with incised patterns, but the folds are never indicated.[3]

[1] M. Reinach, in a recent article (*Revue des Études Grecques*, 1901, p. 127 ff.), maintains that the vases with this subject are of Megarian origin. See also *Arch. Zeit.* 1876, p. 108 ff.

[2] See for fuller discussion *J.H.S.* xviii. pl. 15, p. 282.

[3] See on the subject of these vases generally, Dumont-Pottier, i. p. 329 ff.; *Jahrbuch*, 1890, p. 237 ff.; *J.H.S.* xviii. p. 283; Pottier, *Louvre Cat.* ii. p. 564; and above all, Thiersch, *Tyrrhen. Amphoren* (1898).

CHAPTER VIII

VASE-PAINTING IN IONIA

General characteristics — Classification — Mycenaean influence — Rhodian pottery — "Fikellura" ware—Asia Minor fabrics — Cyrenaic vases — Naukratis and its pottery—Daphnae ware—Caeretan hydriae—Other Ionic fabrics—"Pontic" vases—Early painting in Ionia—Clazomenae sarcophagi.

HAVING traced the history of vase-painting in Greece Proper down to the middle of the sixth century B.C., the point at which a tendency towards unification of style becomes perceptible, we must now turn our attention to the remains of the art on the other side of the Aegean, among the representatives of the Ionian race and in the centres of Ionian influence. To a certain extent it is difficult to treat the subject at all in a handbook, as, owing chiefly to want of material, the existence of an Ionian school of vase-painting has only been realised of late years, and it is as yet too early to sift proofs from theories, or to give a succinct and systematised account of the development and achievements of this school. The most that can be attempted is to present the reader with a review of the accumulated materials, and to point out what groups of vases may be regarded as exhibiting "Ionian" characteristics, or at all events such as permit of their being connected together.[1] It must be borne in mind that some of these fabrics, such, for instance, as the Rhodian wares, have not actually been found in Ionic settlements; in other words, the name Ionian is to be applied to certain styles or schools, in the main associated with that race, apart from considerations of ethnography.

[1] See M. Pottier's excellent *résumé* in his *Louvre Cat.* ii. p. 486 ff.

On one point scholars are in general agreement—namely, that Ionic art is a direct survival of Mycenaean. This was recognised as long ago as 1879 by Furtwaengler[1] and by Lenormant,[2] who pointed out that the silver cauldron dedicated by King Alyattes at Delphi must have been quite Mycenaean in character, although not earlier than the seventh century. It was decorated with aquatic animals and plants. There was in Ionia no disturbing element, such as the Dorian invasion introduced into Europe, between Mycenaean culture and the spread of Oriental influences. The Greek cities in Ionia owe their origin to that upheaval, but their culture was not affected by it; and their founders brought their Mycenaean civilisation with them fresh from Greece to their new homes in Miletos, Ephesos, Phocaea, Chios, and Samos. This was in the eleventh and tenth centuries B.C., and the Panionion, or union of Ionian cities, lasted down to the sixth century (when it was broken up by the Persian invasion), besides stretching out its feelers over the Mediterranean, to the Egyptian Delta and elsewhere. The actual centres of pottery-manufacture are not, however, easy to determine, and much may depend on the results of future excavations. That there was more than one is fairly obvious, and it will probably appear that Clazomenae, Miletos, and perhaps Phocaea, played the most important parts.

As regards the characteristics of the Ionian wares, a rough division may be made into two classes, corresponding to the buff-clay and red-clay Corinthian wares respectively. In the earlier, the vases are always covered with a creamy-white or drab-coloured slip, on which the figures stand out in lustrous black paint.[3] The most typical fabric is that of the Rhodian wares, found in such large quantities in that island, but not necessarily made there. In the later group the place of the white slip is taken by a red coating or glaze similar to that of the Attic and later Corinthian wares, but somewhat brighter.

The principal subdivisions may be classified as follows

[1] *Bronzefunde von Olympia*, p. 45: cf. *Olympia*, iv. p. 109.

[2] *Gaz. Arch.* 1879, p. 208: cf. Athenaeus, v. 210 B, and Pottier, *Louvre Cat.* ii. p. 487.

[3] *Bull. de Corr. Hell.* 1890, p. 378. The painting on a white slip marks an important development, and a rupture with all previous styles (*ibid.*).

(the arrangement is M. Pottier's, with one or two small differences):—

I. 1. Rhodian wares.[1]
2. Samian and "Fikellura" wares.[2]
3. Asia Minor fabrics:
(*a*) Caria.[3]
(*b*) Knidos.[4]
(*c*) Larissa.[5]
(*d*) Myrina.[6]
(*e*) Pitane.[7]
(*f*) Phocaea.[8]
(*g*) Troad.[9]
4. Vases found in the Crimea.[10]
5. Naukratis wares.[11]
6. Clazomenae sarcophagi.[12]

II. 1. Cyrenaic wares.
2. Daphnae wares.
3. Caeretan hydriae.
4. So-called "Pontic" vases.
5. Developed B.F. Ionian fabrics from Clazomenae, Kyme, Naukratis, Rhodes, etc.
6. Italo-Ionic vases of the decadence and Etruscan imitations.[13]

The subdivision between the earlier and later fabrics is, roughly speaking, between those with white and red ground, and between those in which ground-ornaments are used or not. Generally speaking, all the second class have more in common with the Attic B.F. vases than with "primitive" fabrics.

Before proceeding to the consideration of these fabrics in

[1] Pottier, *Louvre Cat.* i. p. 129 ff.; *Ann. dell' Inst.* 1883, p. 179; Dumont-Pottier, i. p. 161 ff.; Böhlau, *Ion. u. ital. Nekrop.* p. 73 ff.

[2] Böhlau, p. 52 ff.

[3] *Ath. Mitth.* 1887, p. 226.

[4] *Rev. Arch.* xxv. (1894), p. 26.

[5] Böhlau, p. 86 ff.

[6] Pottier, ii. p. 277.

[7] Böhlau, *loc. cit.*; Pottier and Reinach, *Nécropole de Myrina*, p. 505.

[8] See above, p. 254; probably a Cypriote fabric.

[9] Dörpfeld, *Troja und Ilion*, i. p. 310.

[10] Stephani, *Comptes-Rendus*, 1870-71, pl. 4 = Reinach, *Répertoire*, i. p. 34.

[11] *Naukratis I.*, *II.*; *J.H.S.* x. p. 126 ff.

[12] See below, p. 362.

[13] For bibliographies of Class II. see below, pp. 344, 349, 358 ff.

detail, it may be as well to note some of the general characteristics of Ionian pottery. In the use of incised lines and accessory pigments we may note two points: firstly, the absence for some time of any attempt at incised lines, their place being taken partly by contours drawn in outline on the clay; secondly, the use of white lines or patches for details. The incised lines, when they do appear, seem to be derived from Corinth. We may, perhaps, detect their arrival in the vases with imbrications (see p. 311), which were imported thence to Rhodes; but another theory is that they were derived from engraved work in metal. Practically their place had been, and to some extent continued to be, taken by the white paint, which, be it noted, is obviously a Mycenaean survival or revival.[1] It frequently occurs on the pottery of Ialysos and Enkomi, in precisely the same manner as we see it used in Rhodes or on the sarcophagi of Clazomenae. Sometimes both the incised lines and the white-paint details are found on the same vase, as is seen in some of the Rhodian jugs, or on a pinax from Naukratis.[2] The white pigments are usually laid directly on the clay, not on the black, as at Athens. They are used for flesh tints, but not to distinguish sex (cf. the Caeretan hydriae, p. 355, where men are painted white, as on the Melian vases they are yellow).

As regards the ornamentation, the persistence of Mycenaean motives is exceedingly remarkable.[3] It is seen especially in the fabrics of Rhodes and Naukratis, with their wealth of ground-ornaments, and is found not only in the more conventional motives such as spirals, or scale-pattern, but also in the vegetable patterns. There is generally in the floral decoration of the vases a tendency towards the naturalism of Mycenaean pottery. Animals, when decoratively treated, are usually arranged in long friezes, contrasting with the Corinthian method of grouping them heraldically in pairs.[4] In the human figures Oriental influence is frequently prominent, as in the hybrid beings which so often adorn the vases, or in such types as the "Asiatic Artemis"; or, again, in small details, the conical

[1] See *Monuments Piot*, i. p. 45.

[2] Cf. Fig. 94 below; *J.H.S.* vi. p. 186, viii. pl. 79; and *Monuments Piot*, i. pl. 4.

[3] See Pottier, *op. cit.* p. 503.

[4] See *Röm. Mitth.* 1887, p. 180.

caps and shoes with turned-up toes, which recall the figures on the monuments of Lydia and Phrygia. Oriental costumes generally are reproduced with great fidelity. As a rule the proportions are gross and heavy, as compared with the slimness of figures on Attic vases, wherein a curious contrast may be observed with the characteristics of Ionian and Continental architecture and sculpture, in which these features are reversed. There is, moreover, a conspicuous absence of stiffness in the Ionian compositions—rather, a remarkable freshness, vigour, and originality quite in advance of their time. Another point of contrast with the Attic vases is the absence of any differentiation of the sexes in the shape of the eye, which is always oval (cf. p. 408).

In the choice of subjects the same law may be observed to prevail as in the Corinthian wares—that of the *hiérarchie des genres.* Mythological subjects appear first about the middle of the seventh century, in the Euphorbos pinax. Later we find actually scenes of a quasi-historical character, as in the battle-scenes on the Clazomenae sarcophagi and the Cyrenaic Arkesilaos vase. Throughout there is a remarkable absence of inscriptions, which are only found at the most on some half-dozen vases. The height of the Ionian style may be said to have been reached in the seventh century, lasting up to about the middle of the sixth; thence there is a rapid downfall, due mainly to historical causes, and the traces of its influence are only to be sought in Italian imitations of an inferior kind, and in some of the Attic black-figured vases, such as those of Amasis and Nikosthenes.

But the influence that was exercised during all this period by Ionian art in general on Greece is not easy to estimate; it is not confined to the pottery, but is found in sculpture and architecture as well as the minor arts. There are numerous passages in ancient writers bearing on the activity of early Ionian artists, such as Theodoros and Rhoikos of Samos, and their works, which often took the form of offerings of Asiatic princes to the Greek temples. The Ionic school of sculpture, illustrated by the early temple at Ephesos, the "Harpy" Monument, and other notable works, as well as the great Amyclaean throne, which

Bathykles of Magnesia was commissioned to erect, established the fame of early Greek sculpture in no small degree; and Ionic architecture, though slower to win its way to favour in Greece Proper, reached a high degree of excellence at an early period on the eastern shore of the Aegean. Of painting in Ionia, apart from the vases, we propose to speak later. In literature and in civilisation generally Ionia was, up to the middle of the sixth century, far more advanced than any part of the Greek mainland.

§ 1. Rhodes and Asia Minor

The distinctive pottery of Rhodes,[1] which, whether of local manufacture or not, is found almost exclusively in that island,[2] represents the union of Mycenaean elements with a new feature, that of Oriental influence. Although primarily due to the dispersion of the Phoenicians by Assyria in the eighth century, this Orientalising of Ionia is purely artistic and industrial, not political, and is due to the commercial activity of the Phoenicians. The pottery represents a sort of transition between Assyrian and Greek decorative art, the essentially Greek elements in which are a survival of Mycenaean ornaments and a Mycenaean faculty of observation of nature, especially in the animal world. From the East were derived such features as hybrid monsters (the Sphinx, Siren, etc.), animals such as the lion, isolated motives like the lotos-flower and the rosette, and generally a tendency to imitate textile fabrics with long bands of decoration, in which the ground is strewn with these rosettes and other ornaments. We have already seen that these features also made their mark on the Corinthian style, but they are more especially characteristic of Rhodes. Human figures are exceedingly rare.

In regard to the shapes a great advance is made towards the classical types; the parts of the vase are more clearly distinguished, and the forms are few and consistent. The special

[1] See generally Pottier, *Louvre Cat.* i. p. 129 ff. A list of Rhodian vases is given in *Ann. dell' Inst.* 1883, p. 179.

[2] For fragments found in Cyprus see *J.H.S.* xii. p. 142; *B.M. Excavations in Cyprus*, p. 104, fig. 151.

Rhodian shape is the oinochoë, a large jug with trefoil lip and spherical body, decorated with two or three friezes of animals (see Plate XX. and p. 177); next in popularity is the circular plate or *pinax*. The ornamentation is always in lustrous black paint on the characteristic white or drab-coloured slip, with a free use of purple for details. White is little used as an accessory—there seems to have been a prejudice against its use when the ground of the vase was also white—but incised lines occur more freely. On the other hand, the heads of animals are almost always outlined in black on the clay ground, a feature derived from Mycenaean pottery, and interior details are also frequently left in the ground of the clay, as in the Geometrical style. We have already mentioned instances in which the two methods are found on the same vase.

The typical Rhodian oinochoae, like the contemporary Corinthian vases, owe much to the imitation of the textile embroideries of Assyria, of which we have already spoken under the other head (p. 312). These had become familiar in Rhodes through the agency of the Phoenicians, but it is also possible that the Ionians were themselves proficient in this industry. The bands of lotos-ornament and friezes of animals also appear on the porcelain vases found in large numbers at Kameiros (p. 127), which are sometimes most elaborately ornamented, and are clearly of Phoenician origin; the seventh century was, in fact, the time when the Greek world was most dominated by Oriental influences.

The ornamental patterns on the vases of this class fall under two heads—the smaller independent ground-ornaments, and the more elaborated bands of vegetable ornament. The former are best illustrated by the Euphorbos pinax, presently to be described; in contrast to the unvarying Corinthian rosette, they show a considerable variety of treatment, and are partly variations on the rosette theme, partly geometrical, like the fragments of maeander, or crosses with hooked arms, which recall in form the ubiquitous *swastika*. The band of lotos-flowers and buds actually occurs at a much earlier date in Boeotia, as we have seen, but it is at Rhodes that it first assumes the characteristic Greek form. On the pinakes a development of this motive,

forming a fan-shaped combination of radiating leaves, is usually employed to fill in the "exergue" below the designs; a similar ornament is found on the black wares with incised patterns, and it is the forerunner of the pear-shaped radiations painted on the small bowls of a more recent date.[1]

A typically Ionian motive is the plait-band, found at Naukratis and on the Clazomenae sarcophagi, and introduced from Assyria. The Mycenaean spiral, so prominent in Attica and Melos, retires into the background, or loses its geometrical significance, and becomes a mere vegetable motive, an adjunct to the floral combinations of bud and flower. The Rhodian vases are, in fact, the first in which spiral motives were freely used for calyx-ornaments, as, generally speaking, they were the first in post-Mycenaean times to raise floral motives from mere ground-ornaments to independent decoration.[2]

The series of pinakes yield the most interesting examples of Rhodian vase-painting; they are usually decorated with a figure of a ram or other animal on a large scale (Plate XXIV.), the exergue or lower portion of the field being filled in with a suitable pattern, such as a sort of fan-pattern of spreading rays or fronds (see above), or a free variation of the Egyptian lotos-flower. But one is of surpassing interest and importance, the famous Euphorbos pinax as it is generally called, which was found at Kameiros, and is now in the British Museum. The subject is the combat of Menelaos and Hector over the body of Euphorbos,[3] a scene from the *Iliad*, but not reproduced in accurate detail, as, indeed, is seldom the case in archaic art. The figures are drawn partly in outline, with a lavish use of purple for details, and the whole of the ground is filled in with various ornaments, rosettes, etc., one at the top of the scene taking the form of a pair of eyes, with a conventionalised floral pattern between. Additional interest is given to the design by the fact that the figures are named, the words being in the Argive alphabet (see Chapter XVII.).

[1] Cf. examples in Cases 43-4 in the First Vase Room, Brit. Mus.

[2] See generally Riegl, *Stilfragen*, p. 160.

[3] *Il.* xvii. 60 ff.: see Chapter XIV. The vase is published by Salzmann, *Nécropole de Camiros*, pl. 53; Baumeister, i. p. 730, fig. 784.

This inscription does not necessarily affect the question of the place of fabric of the pinax, as it has been shown that the Argive alphabet was used in Rhodes in the seventh century[1]; but it enables us to fix its date about B.C. 650, and the whole of the Rhodian ware may be regarded as belonging to the seventh century. It has, indeed, been suggested that the subject is copied from an Argive metal relief, and this might account for the unexpected presence of an inscription.

As to the place of fabric of Rhodian ware generally, it has been more than once suggested that it is to be sought, not in Rhodes, but in the neighbouring Ionian city of Miletos.[2] Dümmler's theory of an Argive origin, resting as it does almost exclusively on the Euphorbos inscriptions, is practically negatived by the absence of any similar pottery in the extensive finds at the Argive Heraion. Miletos, however, was in close connection with Rhodes, and in favour of the argument is the remarkable parallelism of the pottery of Naukratis, which was undoubtedly in close association with Miletos; it was, in fact, first colonised by Milesian Greeks, and the Milesian Apollo was worshipped there. But further evidence is needed before this view can be regarded as other than a mere hypothesis. At all events, no convincing argument has as yet been urged against the pottery being of local manufacture. In date, as has been said, it covers the seventh century, being thus contemporaneous with the Melian and earlier Corinthian fabrics.

In one of the extensive cemeteries of Kameiros, known as Fikellura, there were found quantities of a class of pottery which has since been generally known by that name, but is probably not a local fabric. It has also been found in large numbers in the island of Samos,[3] where Rhodian vases are comparatively rare, and owing to this more recent evidence the ware has been regarded as probably of Samian origin. Several specimens were also found on another Ionian site, that of Daphnae in the Egyptian Delta, but are quite distinct from

[1] *Ath. Mitth.* 1891, p. 118: cf. *Jahrbuch*, 1891, p. 263, and *Berl. Phil. Woch.* 1895, p. 201.

[2] The latest supporter of this view is Böhlau (*Aus ion. u. ital. Nekrop.* p. 73 ff.).

[3] Böhlau, *op. cit.* p. 53 ff.

1

2

1, Pinax from Rhodes; 2, Bowl from Naukratis (British Museum).

the local fabric of that place. The date of the tombs in Samos is the second half of the sixth century, and it is noteworthy that from the ornamentation of these vases all Oriental influence has disappeared. On the other hand, they seem to represent the last lingering vestiges of Mycenaean influence. The majority are in the form of amphorae, but other forms, such as jugs and lekythi, are known. The technique is that of the Orientalising vases, with the typical Ionian creamy-white slip; the black has a tendency to become brown, or even red, and purple accessories are employed. Incised lines do not appear, but details are marked by spaces left in the

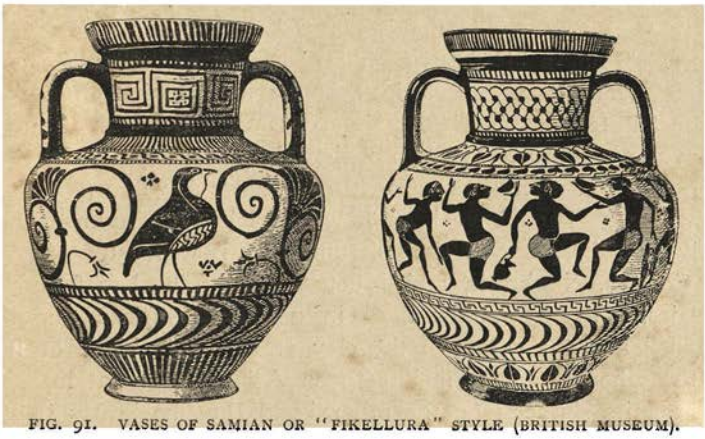


FIG. 91. VASES OF SAMIAN OR "FIKELLURA" STYLE (BRITISH MUSEUM).

ground of the clay. The subjects are simple in character and arrangement, usually one or two animals (or sometimes human figures) on either side of the body, the spaces being filled in with palmettes, spirals, or other ornaments. The ornamentation is strikingly characteristic, especially the network patterns on the necks of the vases, the scale-patterns, and the bands of crescents which we also find in use in Lesbos and at Daphnae.[1] They form altogether a clearly-distinguished group, but sometimes show signs of late date, if they are not actually to be regarded as archaistic. Examples are given in Fig. 91.

[1] Böhlau regards this pattern as "Mycenaean," on the ground that it does not follow the lines of the vase.

The system of decoration is curiously reminiscent of the Mycenaean vases,[1] as exemplified in the great prominence given to the ornament as the main decoration, the scrolls and palmettes recalling the seaweed and other vegetable patterns on the former. This prominence of ornament is always an Ionian characteristic, retained as late as the Caeretan hydriae (p. 354), with their bold bands of palmettes and lotos-flowers round the very centre of the body. The scale-patterns, another Mycenaean legacy, we shall meet with again at Daphnae, where similarly they cover the most prominent part of the vases. The most representative series of Fikellura vases is that in the British Museum, from Rhodes, Naukratis, and Daphnae; there are also some in the Louvre (A 321-34).[2]

Dr. Böhlau, in his treatise on Ionian pottery,[3] discusses as a class certain vases which, in accordance with his theory, he terms "Later Milesian." At all events, they demand attention from the remarkable way in which they combine Ionian and Corinthian characteristics, sometimes, as we have seen, on the same vase. They have been found in Rhodes, Naukratis, and Italy, but the place of their manufacture is variously assigned to Corinth, Naukratis, and Miletos.[4] An oinochoe found in Rhodes, with the incised lines in one animal-frieze and the details left in the colour of the clay or shown in black outline in the other, seems to incline to an Asiatic origin, at least as regards its shape[5]; on the other hand, the fine krater in the Louvre[6] is of a form more usually associated with Corinth. The upper half of the latter is Corinthian in style, the lower Rhodian, and thus there is not much to choose. But on the evidence adduced by Dr. Böhlau[7] it would seem to be more probably of Ionian fabric. It may be that further evidence will enable us to assign these vases of mixed style to Naukratis, always a meeting-place of styles or fabrics; but it has not as yet been definitely ascertained to what extent the earlier fabrics

[1] Cf. Furtwaengler and Loeschcke, pl. 21, fig. 188, and *Mon. Antichi*, vi. pl. 11, figs. 30, 34.

[2] See Böhlau's list, *op. cit.* p. 53 ff.

[3] *Op. cit.* p. 79.

[4] Pottier, *Louvre Cat.* ii. p. 524; *Naukratis I.* p. 50; Böhlau, *loc. cit.*

[5] *J.H.S.* vi. p. 186, fig. 3 (now in Berlin). Cf. Fig. 94 on p. 346.

[6] E 659 = *Monuments Piot*, i. pl. 4, p. 43.

[7] *Op. cit.* p. 85.

of that place are local in origin. Meanwhile, the group is one that fully deserves separate consideration. Dr. Böhlau points out that it is characterised by the half-palmettes at the handles of the vases, by the Mycenaean-like spirals, and the inferior careless ground-ornaments, and generally by its deviations from the normal Rhodian types.

The black ware with patterns in purple and white and incised lines which has been mentioned as found in Rhodes is regarded by Böhlau[1] as Aeolic. It is, as we shall see, paralleled at Naukratis by wares which there is good reason for regarding as of Lesbian origin. The typical form of decoration, the fan-shaped palmette, also occurs at Daphnae. In any case there is clearly an attempt at the imitation of metal vases, the polychrome colouring being intended to reproduce the effect of bronze inlaid with gold and silver. But before it can be established as an Aeolic fabric more results must be obtained by excavation in that part of Asia Minor.

In various places on the mainland of Asia Minor (see p. 62) vases of early fabric have been found, about which at present little is known, except that they usually show some points of comparison with the recognised Ionian fabrics, and may therefore be regarded as of local manufacture, or at least from some place on the coast of Asia. An attempt has indeed been made by Böhlau to recognise in these also an Aeolic fabric, centring in the neighbourhood of Kyme and Myrina. An example is to be seen in the remarkable vase found at Myrina,[2] with the bust of a man painted in outline, which resembles in shape the Fikellura vases, and is probably intermediate between the Rhodian and this fabric. Similar pottery finds have been made at Larisa, at Pitane, and in the Troad. At Larisa and Myrina Böhlau notes vases of the earlier Rhodian style, and at Larisa others which show a distinct independent derivation from Mycenaean pottery, especially in the ground-ornaments. On the site of Troy Dr. Dörpfeld found fragments of pottery of a Rhodian type with ornaments of pear-shaped leaves, such as occur on late sixth-

[1] *Op. cit.* p. 89 ff.

[2] *Bull. de Corr. Hell.* 1884, pl. 7; Pottier, *Louvre Cat.* ii. p. 274.

century bowls from Kameiros[1]; also a vase with a female head resembling that from Myrina, and another of Naucratite character. There appears to have been a local fabric in the sixth century—or perhaps even later—of flat bowls with bracket-handles, on which are painted figures of birds, etc., in coarse black pigment without any incised lines or accessories; a series of these is in the British Museum, and others were found by Dr. Dörpfeld (see above, pp. 61, 259).

In Caria the Ionian style is represented by finds at Stratonikeia and Mylasa,[2] with ornamentation of Mycenaean character, which appears to have reached a similar stage of development to the earlier Graeco-Phoenician vases from Cyprus; many analogies may be noted. That the Mycenaean influence was strong in Caria is also shown by the pottery of transitional character found by Mr. Paton at Hissarlik.[3]

At Temir-Gora (Phanagoria) in the Crimea a vase was found in 1870 with paintings in brown on buff ground, representing a hare-hunt, panthers, and other animals.[4] The style has evident affinities to that of the "Rhodian" vases, and Phanagoria being a Milesian colony, this is only natural. But it seems to be a local product, not an importation; the panther, for instance, is unknown on Rhodian vases proper.

§ 2. AFRICA

The fabrics of the Ionian school are not confined to Asia Minor as regards their place of origin. In the Greek colonies which were founded in Africa in the seventh and sixth centuries we find evidences of great industrial activity, and in some cases extensive remains of painted pottery, which exhibit a close connection with the fabrics more closely associated with Asia Minor. There is, however, one group of vases which seems to stand by itself, and which, though it may be ranked with the Ionian fabrics from its use of the white slip and

[1] See examples in B.M. (Second Vase Room, Cases 24-5). The B.M. also possesses similar vases found in the Troad.

[2] *Ath. Mitth.* 1887, p. 223.

[3] *J.H.S.* viii. p. 68 ff.

[4] Stephani, *Compte-Rendu*, 1870-71, pl. 4, p. 178; Reinach, i. 34.

from the original naturalistic treatment of the subjects, yet shows a marked independence both in technique and in decoration.

The vases grouped under this head have been found chiefly in Etruria, but more recently several examples have come to light in the Ionian colony of Naukratis in the Egyptian Delta and in Samos.[1] As long ago as 1881 it was proposed by Puchstein to connect them with the Theraean colony of Kyrene on the north coast of Africa, on the ground of the subject depicted on the finest and most remarkable of them—the Arkesilaos cup of the Cabinet des Médailles at Paris. When, however, the Naucratite specimens turned up, it was thought that they might after all be a local fabric of that colony, especially as that place was known to have had a close connection with Kyrene, whence about 570 B.C. came the queen of Amasis, who was a great benefactor to Naukratis. But to urge only one of the opposing arguments, there seems to have been little or no export of pottery *from* Naukratis, although imported specimens have been found there of almost every early fabric known. It was reserved for the ingenuity of Dr. Studniczka[2] to identify a scene on a fragmentary cup found there with the figure of the nymph Kyrene, the patron goddess of that city, and thereby to establish definitely the origin of this class. Curiously enough, no remains of the early colony of Kyrene have ever been discovered; but when, if ever, they are brought to light, it may be confidently hoped that further evidence will be obtained.

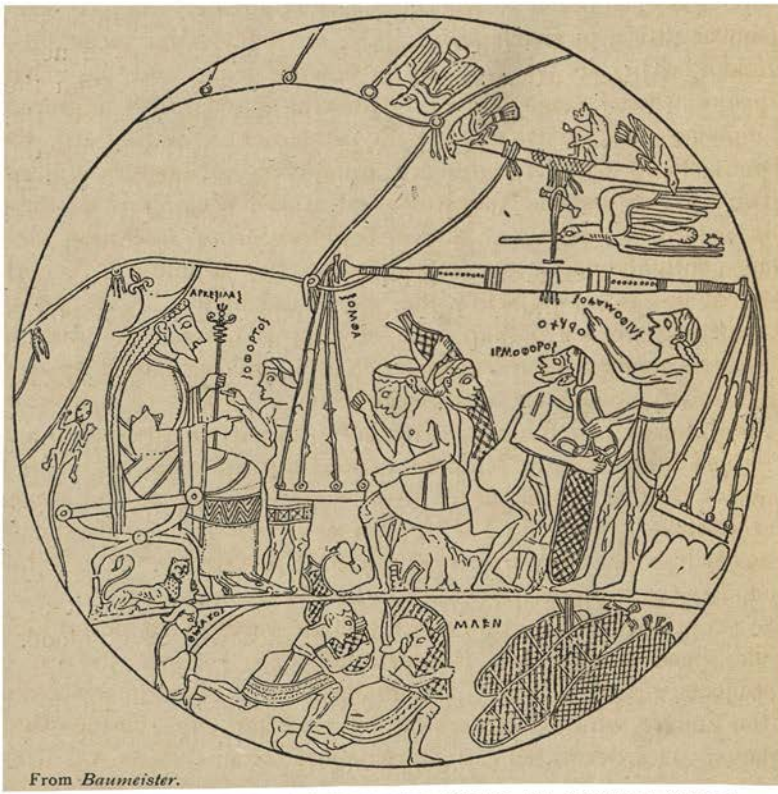
The **Cyrenaic** vases, as they are now generally styled, are for the most part *kylikes* of a slender and graceful form, owing much apparently to metal originals, as indicated by the use of palmettes at the ends of the handles, and by their form and ornamentation in general. The designs are painted in black on a slip varying in tint from deep buff to a pale cream-colour, with firmly-drawn incised lines and a plentiful use of purple for details. The drawing is remarkably spirited, and the subjects mostly marked by *naïveté* and freshness. The popularity of mythological scenes is remarkable; we find

[1] Böhlau, *Aus ion. u. ital. Nekrop.* p. 125.

[2] *Kyrene* (1890), p. 17 ff.

representations of Zeus, Atlas and Prometheus, Kadmos, Pelops, and other heroic figures, besides the remarkable vases which deal with local legend and history.

The Arkesilaos vase[1] (Fig. 92) demands something more than a passing description. It represents the king of Kyrene superintending the weighing of the silphium-plant, which was a



From *Baumeister*.

FIG. 92. ARKESILAOS OF KYRENE SUPERINTENDING HIS COMMERCE (FROM A KYLIX IN THE BIBL. NAT.).

valuable source of his revenue. Although there were four sovereigns of that name, the choice is practically limited to one, the

[1] Baumeister, iii. p. 1664, fig. 1728; Reinach, *Répertoire*, i. p. 81; and see bibliography in De Ridder's *Catalogue*, i. p. 98. It is a matter for much regret that no satisfactory publication of this vase has as yet been made. The best is in Babelon's *Cab. des Antiques de la Bibl. Nat.* pl. 12.

second of the name, who reigned about 580—550 B.C. The scene takes place on a ship ready to sail, of which the yard-arm and part of the sails are visible; from the yard hangs a large balance, inscribed with the word *σταθμός*, in each pan of which is a large mass of some substance, which has generally been interpreted as representing the silphium. But as a matter of fact it is open to doubt whether it is not really wool, or some similar article of merchandise. On the left of the scene, on a folding-chair, sits the king, with flowing locks and large hat, before whom a man named Sophortos stands, with a gesture implying that he is making a statement relating to the transaction. On the right are four men variously occupied, two carrying bags of the stuff tied at the neck; one of these is named *Σλιφόμαχος*,[1] a word of uncertain meaning, but apparently having some reference to the silphium. A horizontal line is drawn below the scene, and in the lower part of the circle we see perhaps the storing of the merchandise in the hold, under the superintendence of an official named *Φύλακος* (guardian); two men are carrying bags to add to a heap of three already stored away. In the upper part of the design and behind Arkesilaos are depicted various birds, a monkey, a lizard, and a panther, perhaps to give local colouring to the scene.[2] The whole is conceived with wonderful *naïveté* and freshness, so much so that early writers regarded it as a parody or burlesque of a serious subject; but this can hardly be the case.

Several other scenes on the Cyrenaic vases merit description, did space permit; but it must suffice to refer to the list of subjects already given. The majority of the specimens are in the Louvre, which possesses no less than ten cups, besides three larger vases, decorated with animals and ornaments only. There are also four in the Cabinet des Médailles, of which, besides the Arkesilaos cup, one representing Polyphemos devouring the companions of Odysseus and the subsequent blinding (all in one scene) is of conspicuous interest. The British Museum possesses two or three cups and several fragments from Naukratis, including the important one restored by Studniczka as representing the local nymph holding branches of silphium and

[1] *I.e.* *Σιλφιόμαχος*. [2] Cf. the Amphiaraos krater (p. 319).

pomegranate, and surrounded by flying daemons, male and female, or Boreads and Harpies (Fig. 93).

Of this series the Arkesilaos cup is the only one with inscriptions. They are without doubt in an alphabet of Peloponnesian, not Ionian, character, as is shown, for instance, by the ↓ for X in Σλιφόμαχος. But this may be explained by reference to the history of the city, which in the seventh and sixth centuries received a considerable influx of the Dorian element, especially from Sparta, whose alphabet may have been adopted for general use.

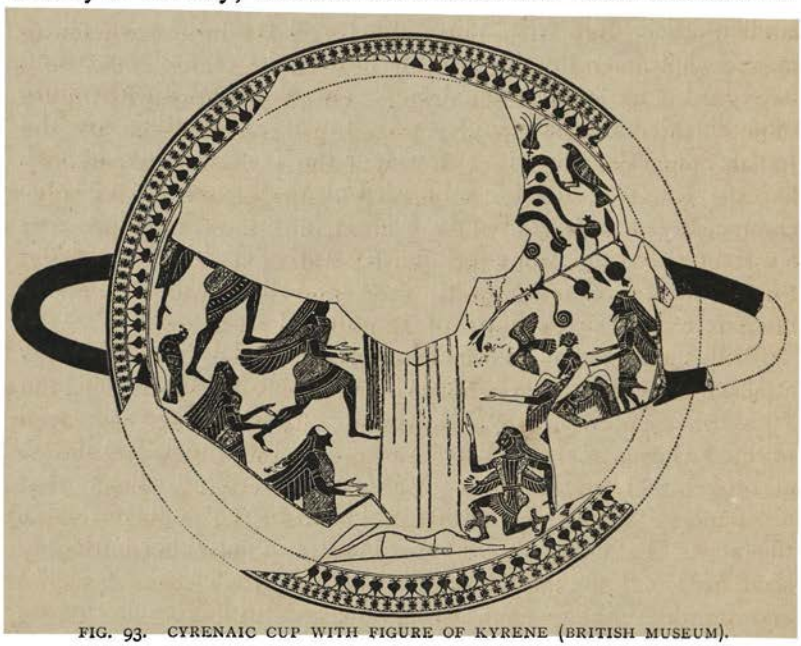


FIG. 93. CYRENAIC CUP WITH FIGURE OF KYRENE (BRITISH MUSEUM).

The total number of specimens in existence is about forty; some of which, however, are merely fragmentary examples.[1]

[1] The list is as follows: B.M. B 1-7; Bibl. Nat. 189-92; Louvre E 660-72; Petersburg 183; Munich 737 and 1164; Vienna 140; two each in the Vatican, Florence, and Würzburg (Nos. 2, 4, 9, 10, 13, 26 in Dumont's list); one in Brussels (*Gaz. Arch.* 1887, pl. 14); *Anzeiger*, 1898, p. 189 (Berlin); Dumont-Pottier, i. pp. 301, 305, Nos. 17 and 32; Louvre E 667 = *Bull. de Corr. Hell.* 1893, p. 238; *Jahrbuch*, 1901, pl. 3, p. 189, and see *ibid.* pp. 191, 193; Böhlau, *Aus ion. u. ital. Nekrop.* p. 125 ff.; and a doubtful example in B.M. B 58. For an exhaustive bibliography of the subject, see Pottier in *Bull. de Corr. Hell.* 1893, p. 226.

Allusion has already been made to the extensive finds of pottery at **Naukratis**, among the most remarkable of recent years, which have done much to increase our knowledge of Ionian industrial art. As has been said, almost every other early fabric is represented there, from the Melian and Corinthian wares to those of Rhodes and other Asiatic sites, including a large series of Athenian vases or fragments down to the latest times. But with these were present in overwhelming numbers specimens of an entirely new fabric which could only be regarded as local in its origin. Of the pottery with figure subjects three stages can be traced, all characterised by the Ionian cream-coloured slip, of which the earliest is remarkably like the Rhodian wares, the next is distinguished by its polychrome decoration on a white ground, and the third represents a sort of transition from the quasi-Rhodian style of decoration to the regular black-figured ware, and is parallel in many respects to the sister-fabric of Daphnae (see below).

All this pottery was discovered in *favissae* or rubbish-heaps attached to the sanctuaries of Apollo, Aphrodite, Hera, and the Dioskuri, especially the two former. As the vases had been rejected as useless or crowded out by new ones, they are almost all broken and fragmentary. But it is interesting to note that on numbers of the earlier potsherds from the Apollo temple the words *Ἀπόλλωνος ἐμί*, "I am Apollo's," have been roughly scratched, as if the priests had wished to mark them as sacred and preserve them from profane uses, although no longer required. Even more frequent on all the sites are dedications to the respective deities, with the formula *ὁ δεῖνα ἀνέθηκε τῷ Ἀπόλλωνι*, or *τῇ Ἀφροδίτῃ*, in the Ionic alphabet (cf. Fig. 16, p. 139). On palaeographical grounds the inscriptions may be dated as ranging from about 600 to 520 B.C., but there are some difficulties with regard to the date of the foundation of the settlement.

Strabo (xvii. 1, p. 801) assigns the foundation to Greeks of Miletos, about 620 B.C., but the words of Herodotos (ii. 178) are to the effect that Amasis (564—526 B.C.), "who was a phil-Hellene . . . gave those who arrived in Egypt the city of Naukratis to inhabit." If this means that no Greeks had lived

there before his time, we cannot place any of the pottery earlier than 570; but it does not seem unreasonable to take the words to mean that the city already existed, and that Amasis merely recognised the right of Greeks to reside there. Herodotos also tells us that by permission of Amasis the Milesians independently founded the temènos of Apollo. From the evidence of the excavations Messrs. Petrie and Ernest Gardner felt themselves justified in placing the foundation of the city about the middle

FIG. 94. FRAGMENT FROM NAUKRATIS, ILLUSTRATING "MIXED TECHNIQUE."

of the seventh century, a date which certainly seems to be required by the character of the earliest pottery. The disappearance of the local fabrics and their replacement by Attic importations would then fall about 520 B.C.

In the earliest class a distinction, as in Rhodes, is to be noted between figures without incised lines, but with faces in outline, and figures with incised lines, the two being sometimes combined on one vase, as in Fig. 94. It has already been shown that the former must be earlier in origin than the latter. On the other hand, in the polychrome white ware (see below) the incised lines

again disappear; but the more advanced style of the drawing and choice of subjects testifies to its being a later variety. There can, however, be no doubt that the influence of Rhodes (or whatever was the fabric-centre of "Rhodian" pottery) was very strong at Naukratis, and if we adopt Böhlau's theory of a Milesian origin for the Rhodian wares, this is fully accounted for by the history of the place. Consequently the two fabrics are very difficult to distinguish, and, in fact, the difference is mainly in point of style.

There is, however, a class of wares found at Naukratis which does not seem to be of local origin. This is the so-called Polledrara fabric, or black ware resembling that found in Etruria, and especially in the tomb of that name at Vulci (see Chapter XVIII.). It has also been found in Rhodes, where black wares are by no means uncommon, some closely resembling the Italian bucchero in character. It is hardly likely that this ware is Naucratite in origin, although the Polledrara tomb contains objects undoubtedly exported from Egypt. Professor E. A. Gardner[1] has pointed out that one of the black-ware vases bears an inscription showing that it was dedicated by a Mytilenaean, and others have inscriptions in Aeolic dialect. Hence he deduces the theory that this black ware was made in Lesbos, and exported thence both to Rhodes and to Naukratis. He also points out that it is really distinct from the Italian variety both in style and technique, as, for instance, in the Italian use of blue.

But there is a class of pottery, unfortunately only represented by fragments, which appears to be developed partly from the "Lesbian" ware, partly from the early Naucratite fabric, and must certainly be of local origin. It has never been found elsewhere,[2] and the combination of "Lesbian" and Rhodian elements also points to this conclusion. The vases, which seem to have been large bowls, are covered on the inside with a black varnish, on which patterns of purely decorative character (palmettes, pear-shaped rays of Rhodian or Aeolic form, etc.) are painted in white and red. The outside, on the contrary, is

[1] *J.H.S.* x. p. 126.

[2] Other examples of Naucratite wares have been found in Rhodes (*J.H.S. loc. cit.*), Cyprus (*J.H.S.* xii. p. 142), and at Athens on the Acropolis (*Ath. Mitth.* 1889, p. 341).

covered with a white slip, the designs being painted, partly in outline, in various tints, such as flesh-colour, dark brown, purple, dark red, yellow, and even opaque white. In spite of the retention of the Rhodian system of outlines and absence of incised lines, the style is remarkably advanced, and the treatment of details often most careful and elaborate; moreover, the subjects are almost exclusively human figures, although the fragmentary nature of the remains renders the interpretation in many cases almost impossible. They seem to stand on the same level as the Daphnae pottery (see below), both in style and range of subject.[1]

To return to the vases of "Rhodian" type, a few typical characteristics may be noted, showing their development. The earliest specimens are decorated exclusively with animals, painted in the Rhodian fashion, with heads and other parts in outline and details only indicated by leaving them in the colour of the clay. The typical ground-ornaments are the cross with hooked arms, the spiral, and a pattern of diagonals with chevrons between.[2] Later, a preference is shown for large vases, usually bowls or kraters, sometimes also large plates, with friezes of animals and Sphinxes on a corresponding scale. The Rhodian style still obtains, with the addition of purple accessories. The favourite animals are the lion, bull, boar, and Cretan goat; a broad plait-band or guilloche as border is of frequent occurrence; and in addition to the ground-ornaments already mentioned, various forms of rosettes and borders of maeander are found. On a large bowl dedicated to Aphrodite by one Sostratos (Plate XXIV.), besides lions, Sphinxes, and water-fowl, two dogs are seen attacking a boar; the drawing is more advanced than in most examples.[3]

The next stage in which the incised lines begin to appear is best illustrated by the fine plate with a seated Sphinx,[4] where they are combined with outlined contours (in the head), and details rendered by white laid on the black, as also are the

[1] These fragments will be fully illustrated in colour in the forthcoming vol. i. of the *B.M. Catalogue of Vases*.

[2] Cf. A 763 in B.M. = *Naukratis II.* pl. 5, 1.

[3] A 762. Other good examples are A 764, 790, 792.

[4] A 985 = *J.H.S.* viii. pl. 79.

patterns round the rim. Another large plate (A 986) has a dance of men and a frieze of animals with incised lines and purple accessories, but the surrounding patterns (lotos-flowers and palmettes, tongue-pattern, etc.) are in plain black.

Lastly, there is the stage which forms a transition from the earlier or "Rhodian" style to the black-figured, in which for a time the influence of Corinth seems to make itself felt. The figures are painted in black, which often turns to red through faulty firing, on a warm buff ground, sometimes with purple accessories. The favourite shapes are the *lebes* or *deinos* with flat rim, and the column-handled krater so popular at Corinth in the sixth century, with flat-topped handles, on which human heads or animals are painted. Corinthian influence is sometimes also seen in the designs, as in the Sphinxes of B 100; or in other ways, as in the olpe A 1534, with a ram in a panel on one side of the handle. Another curious example is the column-handled krater A 1533, with two friezes of animals, of which the lower is more Ionic in type. The British Museum collection also contains numerous fragments (B 102-3) in this local style, together with a few of other fabrics,[1] among which an interesting representation of Odysseus passing the Sirens may be noted; also a series of chariot-scenes and horsemen, which in style recall the Caeretan hydriae (see p. 355). The merging of the local style in the fully-developed black-figure Athenian style is clearly visible in these fragments, which are interesting from their parallelism, though not their resemblance, to those of Daphnae.

Among the later Ionic fabrics, of practically fully-developed black-figure style (*i.e.* with buff ground, incised lines, and accessory colours), not the least interesting is the group of vases and fragments from **Daphnae** in the Egyptian Delta, now in the British Museum.[2] Like the pottery of Naukratis, they illustrate the relations between Ionia and Africa in the sixth century, but even in a more marked degree, inasmuch as they were more directly influenced by local circumstances.

[1] One Melian; B 102_5 and 102_{29} (with Corinthian inscriptions); B 102_{13}, 102_{27}, 102_{32} (Daphniote), etc.

[2] See generally *Tanis II.* (*Fourth Mem. Egypt Expl. Fund*), pp. 48 ff., 61 ff., pls. 25-31; *Jahrbuch*, 1895, p. 35 ff. and *Ant. Denkm.* ii. pl. 21; *B.M. Cat. of Vases*, ii. p. 41; Endt, *Ion. Vasenm.* p. 18.

This pottery was discovered by Mr. Flinders Petrie in 1886, on a site known as Tell Defenneh, representing the Tahpanhes of the Hebrew prophets and the Daphnae of Herodotos,[1] from whom we learn that a fort was found here by Psammetichos I. at the beginning of the sixth century. As Naukratis guarded the west of the Delta, so did Daphnae the east, with the highway to Syria. Herodotos[2] also speaks of camps garrisoned by Ionian and Carian troops; and if we might identify these with Daphnae, we should have a *terminus post quem* for the pottery, as the camps were desolated by Amasis about 560 B.C. On the other hand, the pottery is hardly to be dated so early from its style, and it is important to notice that it is practically unrepresented at Naukratis, that meeting-place of all early fabrics.

The chief problem with which we are confronted in regard to the Daphnae pottery is whether it is a local fabric or imported. Opinions of scholars are somewhat divided, Dümmler and Endt declaring for the local fabric,[3] Zahn for importations from Clazomenae.[4] The close connection with the fabrics of Asia Minor, such as the Caeretan hydriae and the Clazomenae sarcophagi, cannot be denied, and there are many small details which are peculiar to Ionic vases; but, on the other hand, there is much that is peculiar to this group and tells in favour of a local origin. It is also important to bear in mind that the Daphnae pottery has little in common with that of Naukratis, in spite of the relation of both to Ionia.

It will perhaps be convenient to take the groups of Daphnae fragments one by one, noting the general characteristics and individual peculiarities of each. First we have a group of tall cylindrical vases[5] (one or two of which are completely preserved), of an obviously Egyptian form, which has been called a *situla* or pail (Fig. 95). The clay is of a drab colour, brittle, and badly levigated, and covered with a dark brown varnish laid on a coating of glaze. Owing to chemical causes this varnish has in almost all cases disappeared, carrying with

[1] ii. 30, 107.
[2] ii. 154.
[3] *Jahrbuch*, 1895, p. 35 ff.; Endt, *Ion. Vasenm.* p. 18.
[4] *Ath. Mitth.* 1898, p. 51: and cf. *Bull. de Corr. Hell.* 1892, p. 256.
[5] B.M. B 104-6.

it most of the designs, which can only be distinguished by the incised lines. The figure subjects are confined to panels on either side of the neck, and usually consist of heraldic groups of animals or winged monsters. Round the body are patterns of lotos-flowers and fan-shaped half-rosettes of Rhodian type. The technique, however, and other points recall the Geometrical vases, and this is especially marked in one case (B.M. B 104= Fig. 95), where the panels are bordered and filled in with ornamental patterns of Geometrical style.[1] The whole appearance of this vase, in which the varnish is preserved, is that of the Geometrical style; the method may have been learned through Rhodes. On the other hand, some subjects are of Egyptian type, such as the hawks (B 106_2), and the pair of combatants with their nude bodies and shaven crowns (B 106_1).

FIG. 95. "EGYPTIAN SITULA," FROM DAPHNAE (BRITISH MUSEUM).

Secondly, there is a group of tall slim amphorae, of purely Greek style,[2] with a characteristic scheme of decoration, consisting of panels on the neck, usually containing a Sphinx or Siren, and two friezes round the body, divided by a band of dots; the neck is always divided from the body by a moulded

[1] Cf. for the crosses in the field the Boeotian example given in Fig. 86, p. 287.

[2] B.M. B 107-15.

ring, below which is a polychrome tongue-pattern in black, white, and purple alternately. An example is given in Plate XXV. It is important to note here that the white colouring, of which lavish use is made, is laid directly on the clay, as in other Ionic vases; incised lines are only employed for inner details, not for contours. This group is obviously of later date than the *situlae*, and the points of correspondence between it and the Caeretan hydriae and sarcophagi of Clazomenae (see below) are very marked. Sometimes the place of the main design is taken by a panel of scale-pattern,[1] rendered in colour only, curiously reminiscent of Mycenaean vases. Two other points are worth citing here as presenting the same feature: the two-handled cup with tall stem on B 115$_2$, which is clearly the Mycenaean type of kylix, and the borders of white dots laid on the black which sometimes occur on the draperies. The clay is of a warm yellow colour, well levigated and polished, and the general appearance of the vases is bright and pleasing. The lower frieze on the body usually takes the form of a row of animals, especially of geese feeding; but where the main design is replaced by a scale-pattern, dancing figures are usually found.

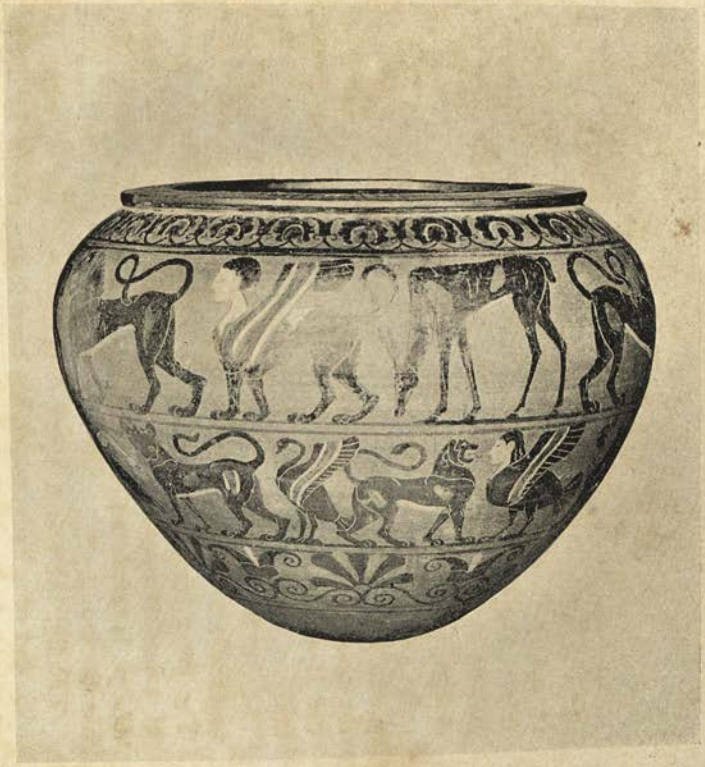
Thirdly, there is a squat form of amphora, with cylindrical neck and wide body, which has been distinguished by the name of *stamnos*.[2] Most of the vases of this form found at Daphnae are of the "Fikellura" type described above (p. 337), and are obviously importations, whether from Samos or Rhodes; but others (nearly all fragmentary) are of the same type as the amphorae. On both shapes a motive is sometimes introduced which is clearly learned from the Fikellura vases, that of a row of crescents, which, instead of being merely painted in black, are treated, like the tongue-pattern, in polychrome.[3] The only other shape found is the hydria, of a type differing greatly from the Caeretan (see below) with its flat shoulder at right angles to the body; but the same typical wreath of pointed leaves

[1] See Böhlau, *Aus ion. u. ital. Nekrop.* p. 65. He derives this pattern through the medium of the "Fikellura" vases.

[2] B.M. B 116-25.

[3] This is also occasionally found at Naukratis, and appears on a fragment from Mytilene in the British Museum (B 99) of Daphniote style.

1



2

Ionian Vases.

1, Situla from Daphnae (British Museum); 2, Deinos in South Kensington Museum.

occurs on both (cf. B 126-27). The list is completed by a few fragments of imported B.F. vases from Athens.

The subjects comprise several interesting mythological themes: Odysseus and Kirke,[1] the Calydonian boar-hunt, Boreas and one of his sons, Bellerophon and the Chimaera. There is a curious series of nude figures on horseback, painted white throughout, accompanied by warriors and dogs; they have usually been interpreted as feminine, but are not so necessarily, as Ionian painters used white indiscriminately for either sex.[2] Dionysiac scenes are popular, but monotonous, and often very coarse; the Satyrs are of the Ionic type, with horses' hoofs, and very bestial in appearance; their place is often taken by grotesque dancers, as on the Corinthian vases. Among small details the Oriental embroidered saddle-cloths[3] should be mentioned, as also the curious hook (*φάλος*) in front of the warrior's helmet on B 11; both are found on the Clazomenae sarcophagi, and the latter is typical of Ionic art.[4]

§ 3. Later Ionic Fabrics

What is in many ways the most remarkable group of Ionian vases is formed by the **Caeretan hydriae,** so called because they have been found almost exclusively at Caere (Cervetri) in Etruria. They form a very homogeneous group, and their typical features are unmistakable. Originally they were thought to be of local, *i.e.* Etruscan, manufacture, or even imitations of Corinthian vases. But since the sarcophagi of Clazomenae and the pottery of Naukratis and Daphnae have been made known and studied, it has been established beyond doubt that they stand in close relation to these undoubtedly Ionian fabrics.[5] If further proof were wanted, it is to be found in a class of Etruscan vases which are clearly imitated from them (see Chapter XVIII.).

[1] *Jahrbuch*, 1897, p. 55.

[2] See Zahn in *Ath. Mitth.* 1898, p. 50.

[3] Cf. the Xanthos reliefs, *Brit. Mus. Cat. of Sculpt.* i. No. 86.

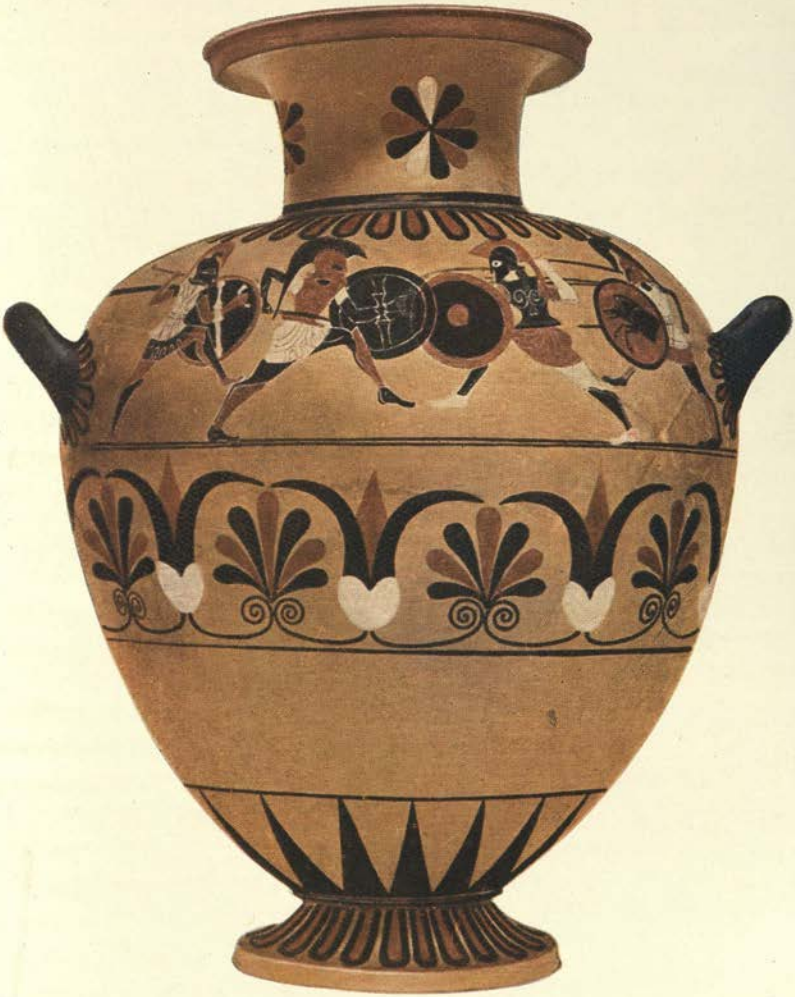
[4] See Endt, *Ion. Vasenm.* p. 17, and cf. coins of Methymna.

[5] Cf. Endt, *Ion. Vasenm.* pp. 5, 13 ff., who points out the similarity in subject and decoration, as also in details of colouring, armour, etc., with the other groups.

They were first collectively discussed in 1888 by Dümmler, who gave a list of fourteen, assigning them to Phocaea ; a more complete list of twenty has since been drawn up by Endt, who to some extent endorses Dümmler's views, but is inclined to attribute them to Clazomenae, on the opposite side of the Gulf of Smyrna, thus bringing them into closer relation with the sarcophagi. Whichever be the correct view, there is no doubt that they come from this region, and the existence of a ceramic fabric at Clazomenae, as attested by the sarcophagi and a few painted fragments of pottery, is in favour of Endt's attribution. We have also to set by the side of this the absence (so far) of any pottery at Phocaea. In any case the place must have formed part of the Naucratite confederation, and it was perhaps influenced much by Rhodes.[1] That the vases have all been found at Cervetri need excite no surprise, as there is abundant evidence that certain fabrics were specially favoured by different places, and apparently made for exclusive importation.

From the circumstances of discovery of some of them they may be dated about the middle of the sixth century B.C. ; the style is remarkably advanced, and shows the rapid development of Ionian art as compared with that of Continental Greece. As regards the form of the hydria, it is characterised by the egg-shaped body, the division of neck from shoulder by a moulded ring, the low flat-ribbed handle at the back, and the high concave foot. Even more marked is the system of ornamentation. The main design runs in a broad frieze round the body, broken at the back by a palmette pattern under the handle, on either side of which are usually grouped two similar or opposed figures, distinct from the principal subject. The rest of the surface is given over to floral patterns, which assume great prominence on these vases. The normal arrangement is as follows : inside the mouth a large tongue-pattern in red, bordered with black ; on the neck, palmette-and-lotos pattern ; on the shoulder, ivy-wreaths or other plants, treated in a naturalistic manner ; round the lower part of the body, a broad band of large palmettes and lotos-flowers

[1] *Revue des Études Grecques*, 1895, p. 182.



To face page 354.

CAERETAN HYDRIA.

(BRITISH MUSEUM).

alternating, forming a very effective pattern and enhanced with white and purple details. An illustration in colours of a typical specimen is given on Plate XXVI.

The range of subjects is wide and original, both in choice and method of treatment. We find among mythological scenes the return of Hephaistos to heaven, the rape of Europa, the contest of Herakles with Busiris, and the hunt of the Calydonian boar.[1] Other subjects, such as combatants or horsemen, are more in the manner of the Clazomenae sarcophagi. A curious feature of the group is the entire absence of friezes of animals. The realistic treatment of the Egyptians on the Busiris vase, and the introduction of apes and other African animals into some of the scenes, clearly indicate a relation with that part of the world, obviously through the medium of one of the Greek colonies of Egypt. Naukratis, as we have seen, was largely colonised from Phocaea, and some of the later fragments from this site[2] show a parallelism with the hydriae.

Among the smaller details which are typically Ionian may be mentioned the horse-hoofed type of Seilenos (as at Daphnae); the four-winged deities and winged boars[3]; the favourite types of stag-hunts,[4] horsemen, and combats, all appearing on the sarcophagi; the running dogs and the owls on horses' backs; the high-peaked cap of women and shoes with turned-up toes. All these are generally, but not invariably, characteristic of the Ionian fabrics, as is the peculiar treatment of boys' hair, which is tied in a tuft at the back.

In regard to technique the chief point is the extensive use of accessories, which give a bright and varied appearance to the vases. And we must also note the general use of white for flesh, of men as well as of women, the white being laid on the black varnish in the Attic fashion, and not on the clay, as usual in Ionia. The clay, too, is not covered with the characteristic creamy slip, but with a red glaze approaching more nearly to the "continental" fabrics. Incised lines are used with great

[1] Vienna 217-18; Louvre E 696. For list of subjects see *Bull. de Corr. Hell.* 1892, p. 254.

[2] B.M. B 103_{14} for instance.

[3] Cf. Louvre E 739. Also found at Daphnae as a shield-device (B.M. B 115_{2}), and on coins of Clazomenae (see Endt, p. 24).

[4] Cf. *Bull. de Corr. Hell.* 1892, p. 259.

care, and folds of drapery are always indicated; the male eye is always oval, and undistinguished from the female.

Two groups of fragments from sites in Asia Minor, though differing in some degree from the Caeretan hydriae, yet obviously stand in close relation. Of these, one set, forming a large krater of the Corinthian type, was found at Kyme in Aeolis[1]; they appear to be later than the hydriae, *i.e.* about 500 B.C., but the style and technique are not dissimilar, except that the white is here laid on the clay ground and the drawing tends to freedom and carelessness.[2] Folds of drapery are not indicated; the typical Ionic motive of a large bud in the field is found.[3] They may be described as a local differentiation from the hydriae, representing the transition from the sarcophagi[4] to B.F. fabrics, or rather, perhaps, forming a link between the Caeretan group and that next to be discussed. The other set was found at Clazomenae,[5] and appears to stand midway between the Daphnae pottery and the hydriae; it is probably of local origin, and also exhibits points of comparison with the sarcophagi. The influence of this fabric has been traced in some Attic B.F. vases which represent a similar scene—the harnessing of a chariot.[6]

There are also various groups of vases (mostly amphorae) of advanced B.F. technique, but thoroughly Ionian characteristics,[7] which seem to trace their descent mainly from the Caeretan hydriae, although the scheme of ornamentation is widely different. In the majority the most striking feature is the adoption of the panel-design, the rest of the vase being covered with black. This is clearly non-Ionic, and probably due to the growing influence of Attic vase-painting, in which it early became a marked feature; but it is usually combined with a distinct neck, on which is a smaller design, and this, on the other hand, is a non-Attic idea. These vases were all most probably

[1] *Röm. Mitth.* iii. (1888), p. 159 ff.; now in B.M.

[2] *Op. cit.* p. 172.

[3] It is found also on the sarcophagi (cf. *Terracotta Sarcophagi in B.M.* pls. 1, 2), on the quasi-Ionic vase, Gerhard, *A.V.* 205, and on B.M. B 379 (see below).

[4] Cf. for instance *Mon. dell' Inst.* xi. 53·4.

[5] *Ath. Mitth.* 1898, pl. 6, p. 38 ff.

[6] Vol. II. Frontisp.; Reinach, ii. 124.

[7] Cf. especially Berlin 2154 (Endt, *op. cit.* pl. 1, figs. 11-13) and Gerhard, *A.V.* 194 = Reinach, ii. 97. They have been discussed by Endt (*op. cit.* pp. 21, 29), by Pottier in *Bull. de Corr. Hell.* 1893, p. 424 ff., and by Karo in *J.H.S.* xix. p. 146 ff.

made in the Clazomenae region; they are, however, rather to be regarded as forming links between the Ionian fabrics proper and the Attic B.F. vases, and are the predecessors of a group of vases of fully-developed B.F. technique which are yet more Ionic than Attic in feeling and treatment (see below, p. 387).

Among these may be mentioned two groups of kylikes, one found in Rhodes and richly decorated with figures within and without, the form suggesting a metallic original.[1] The other consists of a series of kylikes decorated on the outside with large eyes (formerly thought to be of symbolical import), at the head of which stands the well-known Würzburg cup, with the subject of Phineus attacked by the Harpies.[2] This vase bears remains of inscriptions in the Ionic alphabet; the cup is of a form afterward introduced at Athens by Exekias, in which the off-set rim and high foot of the other group are replaced by a wide-spreading bowl of plain convex section, with a low foot. Once adopted at Athens, this type remained firmly in favour throughout the R.F. period.

It has often been remarked that inscribed vases are remarkably rare among Ionian fabrics; there are not more than six at the outside, including the Euphorbos pinax, the alphabet of which we have seen to be Argive.[3] But there are two vases the alphabet of which apparently belongs to the island of Keos, being one of the Ionic or Eastern group, and of these one[4] may well be associated with the later Ionic fabrics. The other, however, is in a style which is usually associated with the Chalcidian group[5]; there is the typical feature of the fallen warrior with face turned to the front. If the two can both be assumed to have been actually made in Keos, the geographical position of that island would account for the combination of these Eastern and Western elements.[6]

[1] B.M. B 379-82; *J.H.S.* v. pls. 40-3.

[2] These have been recently collected and discussed by Böhlau (*Ath. Mitth.* 1900, p. 40 ff.), who notes a total of seventeen. His list is certainly incomplete, as some examples in the British Museum might have been added. See also Furtwaengler, *Gr. Vasenmalerei*, p. 220, who attributes the Phineus cup to Naxos.

[3] See *Ath. Mitth.* 1900, p. 93.

[4] *Mon. dell' Inst.* vi.-vii pl. 78: see Fig. 111 and Chapter XVII.

[5] Gerhard, *A.V.* 205, 3-4 = Reinach, ii. 105: see p. 323.

[6] See on Ionian inscribed vases, Endt, *Ion. Vasenm.* p. 38; Böhlau, *loc. cit.* p. 93.

A complete and detailed list of the Caeretan hydriae and of the allied types may be found in Endt's book (pp. 1, 21, 29, etc.); but a brief summary may also be found useful :—

1. *Caeretan hydriae*: B.M. B 59 (Plate XXVI.); Louvre E 696-702; Vienna 217-18; *Ant. Denkm.* ii. 28 (in Berlin); *Mus. Greg.* ii. 16, 2*a*; Jahn, *Entführung der Europa*, pl. 5*a*; Endt, figs. 1-2, 5-8; four others unpublished. See also generally Dümmler in *Röm. Mitth.* 1888, p. 166 ff., and Pottier in *Bull. de Corr. Hell.* 1892, p. 253 ff., and *Louvre Cat.* ii. p. 534.
2. *Later Ionic B.F. fabrics*, chiefly amphorae, kraters, hydriae, and deinoi, from the region of the Gulf of Smyrna: Louvre E 736, E 737, E 739; Vienna 215; Munich 573, 583, 685; Berlin 1674, 1885, 2154; Würzburg, iii. 328 (= Reinach, ii. 97) and 331; Reinach, ii. 156; *J.H.S.* vi. pp. 181, 185, and *Anzeiger*, 1893, p. 83 (in Berlin); Louvre E 754-81; Berlin 1676 = Reinach, ii. 22, 3-5; and the fragments from Kyme and Clazomenae already discussed. See besides Endt, Pottier in *Bull. de Corr. Hell.* 1893, p. 423 ff.; Zahn in *Ath. Mitth.* 1898, p. 38 ff.; Karo in *J.H.S.* xix. p. 146 ff.
3. *Kylikes of Attic-Ionic style*: (*a*) Rhodian: B.M. *B 379—B 382*: see *J.H.S.* v. p. 220 ff.; (*b*) later type, with eyes (see p. 374); Würzburg, iii. 354 = Furtwaengler and Reichhold, pl. 41 (Phineus cup) and 349; Berlin 1803, 2054, 2056; Munich 428, 468, 630, 553, 711, 1239, 1316, 1027, 1239; and others given by Böhlau; to which may be added the British Museum cups with eyes, B 427 ff., and the amphora B.M. B 215.
4. *Keos fabric* (?): Louvre E 732 = Reinach, i. 162; Gerhard, *A.V.* 205, 3-4.

There are also numerous vases scattered about our museums which are of a debased and inferior B.F. type, and on good grounds have been thought to be of Italian manufacture, whether Etruscan or South Italian. The former usually display unmistakable local characteristics, and there is a class so sharply defined that its Etruscan origin is undoubted, in spite of its affinities to the Caeretan hydriae. A full description will be found in the chapter on Etruscan pottery (XVIII.). Others again have more in common with the class next to be discussed; and, generally speaking, they may all be found to show Ionian affinities. But the line is not easy to draw: debased B.F. vases

may have been produced in Ionia, as they undoubtedly were at Kameiros[1]; but, on the other hand, the extensive export of Ionic wares to Cumae, Cervetri, and other places may have incited the Italian potters, as in the case of the Etruscan class just mentioned, to unsuccessful attempts at imitation.

There remains yet one class of Ionic vases to be discussed, a class which can be clearly defined, but for which as yet no satisfactory name has been found. Like the Caeretan hydriae, they were first discussed by the late F. Dümmler; but his grounds for assigning them to the region of Pontus—whence they have been provisionally styled "Pontic"—have not found general acceptance.[2] They were also originally, like the Caeretan group, thought to be Etruscan, a view which at first sight might seem justified by their rough execution; but style and other reasons preclude such a possibility. On the other hand, it is quite possible that some of them are imitative fabrics made in Southern Italy. All at present known have been found in Etruria.

The group is formed by a series of about twenty amphorae and sixteen oinochoae, to which Endt appends a list of twenty or so which may either be of this fabric or Italian imitations. Another example in the Victoria and Albert Museum, South Kensington, is illustrated on Plate XXV. The list might doubtless be extended. That they date from the first half of the sixth century seems indicated by the discovery of one at Orvieto, together with an early Corinthian cup. Like so many of the Ionic fabrics, they exhibit a fondness for bright colouring, with an extensive use of accessory colours. In some cases Corinthian influence seems to have been at work, especially in the technique. Incised lines are sparingly and carelessly employed, and seldom for contours. Among the subjects mythological scenes are rare, but one of the British Museum examples (B 57) has a curious subject—the contest of Herakles and the Lacinian Hera (the Roman Juno Sospita), assisted respectively by Athena and Poseidon. Winged male

[1] *E.g.* B.M. B 348-58, 439-50.

[2] *Röm. Mitth.* 1887, p. 171 ff. Furtwaengler regards the whole class as South Italian (*Antike Gemmen*, iii. p. 88); Pottier (*Louvre Cat.* ii. p. 538) wavers between Kyme and Italy.

figures are not uncommon, and the typically Corinthian subject of grotesque figures dancing is occasionally found. But the specially characteristic feature of the group is formed by the friezes of animals. Of these there are usually two on each vase, more rarely one; sometimes they are interspersed with figures of men, not representing any definite subject, but as an imitation of stamped metal vases (as on the Bucchero vases of Etruria, Chapter XVIII.). The animals are so characteristic as in themselves to mark off this class as distinct; sometimes they are naturalistic, sometimes conventional, and repetitions in one frieze are very rare.

The favourite quadruped is a deer; Gryphons of a peculiar type and Sphinxes are frequently found, and on some specimens a subordinate frieze of quails.[1] On the necks of the amphorae heraldic groups of panthers or other animals confronted are sometimes seen, varied by palmette and lotos patterns. The latter form the chief decorative motive; but a combination of maeanders and stars (see Chapter XVI.) is often found on the oinochoae, and this, it is interesting to note, also appears on the Clazomenae sarcophagi. On one of the vases published by Dümmler there is represented a combat of Greeks and mounted Barbarians; the latter he identified as Scythians, and mainly on this ground attributed the group to the northern coast of Asia Minor. But they are more likely to be from Phocaea, or Kyme, or one of the neighbouring cities. The oinochoae appear, from the absence of human figures, to be earlier than the amphorae, and the number of friezes often exceeds two; there are also a few minor distinctions.[2]

[1] B.M. B 57; Gerhard, *A.V.* 185: cf. B.M. B 58, which is difficult to classify.

[2] A complete list of this group is given by Endt (p. 39 ff.), and may be briefly recapitulated:—(1) Amphorae: B.M. B 57; Cambridge 43; Bibl. Nat. 171-73; Berlin 1673, 1675; Munich 123, 155; Vienna 216 and Kaiserhaus 278; Würzburg, iii. 79-80, 84; four in Rome (see *Röm. Mitth.* 1887, pls. 8-9); others in Brussels, Karlsruhe, and Orvieto. (2) Jugs: B.M. B 54-6; Bibl. Nat. 178; Munich 173, 176, 1047, 1291; Würzburg, iii. 36 and 40; others in Karlsruhe, Florence, and Boulogne. (3) Ionic or Italian allied fabrics: Berlin 1677-79 and numerous others in Munich and Würzburg, enumerated and illustrated by Endt, p. 55 ff. figs. 27-40: cf. also Louvre E 703 = Reinach, ii. 92 = Endt, p. 65. To his list must be added the vase on Plate XXV.

§ 4. Early Painting in Ionia

It is now time to turn, by way of supplementing our account of Ionic pottery, to the history of the art of painting in general among these peoples, so far as it is illustrated by literary records and by existing monuments other than the vases. That the latter do afford us considerable information on the subject of painting in Ionia is amply shown in the foregoing pages; but there is yet another group of monuments which the material of which they are made would alone entitle to inclusion in this work, apart from the valuable illustration they afford of certain aspects of Ionic pottery.

In the light of modern researches, we are prepared to find in Ionia a great centre for the art of painting in the archaic period. That this region inherited the characteristics of Mycenaean art has already been so abundantly shown that we need not hesitate to believe that, among other branches of art, that of fresco-painting was firmly established in the Asiatic colonies. The art of which Crete, Mycenae, and Tiryns have furnished such remarkable examples is hardly likely to have died out. Hence it need excite no surprise when we read that as early as about 700 B.C. Kandaules, the king of Lydia, purchased for its weight in gold a picture painted by Bularchos representing a battle of the Magnetes.[1] That such an elaborate subject should have been treated at this early date, when the vase-painter had not emerged from his earliest limitations, is, if we may accept Pliny's account, a most remarkable proof of advanced art. Saurias of Samos is also mentioned as an early painter,[2] who "invented silhouette drawing," and Philokles the Egyptian, who "invented linear drawing," was probably a Naucratite, and his "inventions" may be reflected in the outlined paintings on white ground which have been described above. Lastly, we read that about 515 B.C. Mandrokles of Samos painted a picture which represented Dareios watching his army crossing the Bosphoros,[3] and Kalliphon of Samos, probably a contemporary, painted scenes from the story of Troy.[4]

[1] Pliny, *H.N.* xxxv. 55.
[2] Athenag. *Leg. pro Christo*, 17, 293.
[3] Hdt. iv. 88.
[4] Paus. v. 19, 1, x. 26, 6.

Combining these traditions with what we also know of Ionic painting from the pottery, we should expect to find that its characteristic form was that of figures in black silhouette or outline on a ground covered with white slip; and, further, that the subjects treated were by no means of an elementary character, but comprised elaborate battle-scenes or groups of warriors, and even historical themes. Now, these conditions are exactly fulfilled in the group of terracotta sarcophagi excavated during the last twenty years at or in the neighbourhood of Clazomenae, on the Gulf of Smyrna. It is practically certain that all have come from this district,[1] and no attempt has ever been made to connect them with any other site. Further, we have already seen that there are reasons for attributing some of the vase-fabrics to this place, or at least for connecting them closely with the sarcophagi; and thus there are good grounds for regarding Clazomenae as one of the principal centres of Ionian art.

The sarcophagi which have come to light up to the present number over twenty, inclusive of fragments, but very few are anything like complete. There are fine specimens at Berlin, Paris, Vienna, and Constantinople, with paintings round the flat rims; but all are overshadowed by the magnificent example recently acquired by the British Museum,[2] which is absolutely complete, with a massive gabled cover, and decorated over almost every inch of its surface with subjects or ornamental patterns. Its dimensions are: body, 7 ft. 6 in. by 3 ft. 9 in. by 2 ft. 9 in.; cover, 8 ft. by 4 ft. by 2 ft. The only undecorated portions are the central panels on the sides of the coffin and the bottom, but in some other parts the designs are largely worn away. It is made of a coarse brick-like clay of very hard consistency, which is completely covered, except on the bottom, with a thick white slip to receive the paintings. The figures are painted throughout in black silhouette, without any method of reproducing inner details except by *traits réservés*, *i.e.* by

[1] The British Museum possesses a sarcophagus of the same type from Kameiros in Rhodes (Murray, *Terracotta Sarcophagi*, pl. 8).

[2] Published by A. S. Murray in *Terracotta Sarcophagi in Brit. Mus.* pls. 1-7, and in *Monuments Piot*, iv. p. 27 ff.

leaving them unpainted on the white ground; but the greater part has been imperfectly fired, so that the black has become bright red.

On the long sides of the interior are representations of funeral games, such as contests with spears and a chariot-race; the shorter sides have groups of warriors on horseback and on foot. The chariot-races are also repeated along the flat rim of the coffin, the exterior and the space above the interior designs being ornamented with bands of egg-and-dart moulding and the typical Ionic pattern of maeander interspersed with stars, which we have already met with in the pottery (p. 360). The main designs on the cover are in two rows, those on one side having almost entirely disappeared; on the complete side the upper band represents an episode from the story of Dolon, the lower an ordinary scene of combat.[1] The gable-ends have groups of Centaurs and horsemen, and along the lower edges of the cover, underneath, are further scenes from the Doloneia, groups of Sphinxes and Sirens, and bands of ornamental pattern (rosettes, maeander, etc.). Of the many minor details of interest in these paintings this is not the place to speak; but they have been fully discussed by Murray (*op. cit.*), especially peculiarities of armour and costume.

It is possible that the battle-scenes on this and other sarcophagi may, as Murray and S. Reinach[2] have suggested, have some bearing on the question of the painting by Bularchos already mentioned. It would, at all events, help to explain the selling of the painting for its weight in gold, if we may regard it as painted on terracotta; but it is not safe to say more than that the sarcophagi confirm the story to the extent of showing the popularity of such subjects in early Ionian art.

Many of the motives on the British Museum sarcophagus are found repeated again and again throughout the series, especially the battle-scenes; groups "heraldically" composed, such as a warrior between two chariots or horsemen, or pairs of

[1] See Murray's description and commentary, *op. cit.* p. 7 ff., and in *Monuments Piot*, iv. p. 40.

[2] *Revue des Études Grecques*, 1895, p. 161 ff.

Sphinxes (Plate XXVII.), or animals confronted, are of constant occurrence. There are also various minor motives constantly repeated, such as helmeted heads of warriors (Plate XXVII.),[1] pairs of horses, one looking up, the other down (this being a convenient position for silhouettes), or dogs running under the horses.

M. Joubin,[2] considering the group of sarcophagi as a whole, recognises a triple development in form, technique, and decoration, enabling him to divide them into three classes. In regard to technique we observe throughout a remarkable combination of two methods, the details of figures being expressed either by outlining or by leaving in the colour of the clay, as in the earlier Rhodian and Naucratite vases (see p. 331 ff.), or by lines of white paint *laid on the black*. The latter method, which is not unknown on the vases (see p. 347), was no doubt used in place of incising, which would have been a difficult matter in the hard clay.[3]

In the oldest group, then, the usual method is that of outlining or "reserving" on the clay; the second group may be regarded as transitional[4]; and in the third group, which in style answers to the Caeretan hydriae and later Ionic fabrics, the use of white for details, and even of purple, is general. But it is noteworthy that, for the groups of animals at the bases of the sarcophagi or elsewhere, the old "Rhodian" method of the earlier examples is retained. This, it may be remarked, is in accordance with a principle by which an older technique tends to survive in subordinate decoration, just as on R.F. vases friezes of animals or ornamental patterns are frequently painted in the old black-on-red method.[5]

In the decoration the development is in the direction of scenes with human figures, in preference to friezes of animals and floral patterns; the compositions advance from single figures to large groups, and accessory figures are introduced,

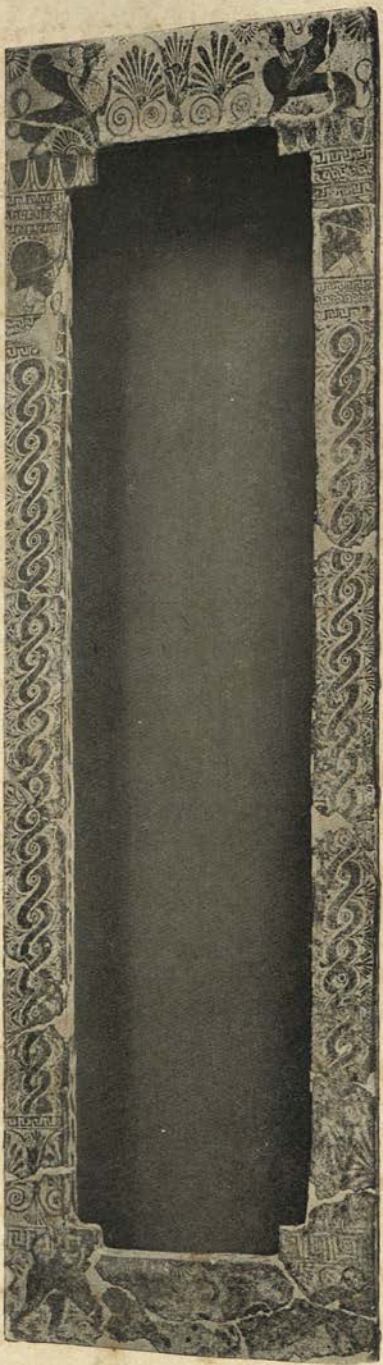
[1] Cf. the archaic Rhodian vases in the form of helmeted heads (*e.g.* B.M. A 1117, 1118, 1121; Pl. XLVI. fig. 1).

[2] *Bull. de Corr. Hell.* 1895, p. 89.

[3] Cf. *J.H.S.* vi. p. 185.

[4] Examples of the earliest are Nos. 9-12, 16-18 in list below; of the second, Nos. 8, 13, 15 in list below.

[5] *Bull. de Corr. Hell.* 1892, p. 240 ff.



RCOPHAGUS FROM CLAZOMENAE (BRITISH MUSEUM).

like the dogs under the horses. Finally, we have the long friezes of figures which are so characteristic, for instance, of the British Museum sarcophagus. Mythological scenes, except the Doloneia, are conspicuously absent; battles, chariot-races, and hunting-scenes have the preference, as well as the heraldic groups of animals.

Nor is the development confined to the main decoration; it may be traced both in the form of the sarcophagi and in the subordinate ornamentation.[1] The older examples approach more to the human form, with a shouldered opening at the top indicating the place for the head; but towards the end of the series the rectangular form predominates—the opening enlarges, and the upper edge projects over the lower. The British Museum example and one in Constantinople[2] are very elaborate, with mouldings and carefully-considered architectural proportions. The origin of the form is doubtless to be traced to the Egyptian mummy-cases, or perhaps to Chaldaean sarcophagi; but the Cretan cinerary urns (p. 145) are also on the same plan, and may have formed an intermediary link.

In point of date the sarcophagi seem to extend over the greater part of the sixth century. We have seen that some present the same characteristics of painting as the earlier Rhodian and Naucratite fabrics; others fall more into line with the Caeretan hydriae and Ionic B.F. pottery. In any case the sarcophagi form our best standard for determining the sequence and relation of the Ionic fabrics, and at the same time furnish an argument for regarding Clazomenae as one of the principal centres of Ionic pottery. M. Reinach is of opinion that none are later than about 540 B.C., at which time the people of Clazomenae, menaced by the invading power of Persia, migrated to the neighbouring islands. But one or two instances of advanced technique seem to point to a later date.

[1] The principal decorative patterns are the guilloche or plait-band; maeander, often combined with stars, as on the "Pontic" vases; palmettes; a bold egg-and-dart pattern of Ionic type. For an Egyptian prototype of the maeander-and-star pattern, cf. Perrot, *Hist. de l'Art*, i. fig. 541.

[2] *Mon. dell' Inst.* xi. 53 = No. 15 below.

The list of Clazomenae sarcophagi as at present known is as follows[1]:—

	Reinach's List.	Joubin's List.	
1. Brit. Mus. (1895) .	—	—	*Terracotta Sarcophagi*, pls. 1-7.
2. Brit. Mus. (1900) .	—	—	—
3. Brit. Mus. (1902) .	—	—	Plate XXVII. of this work.
4. Brit. Mus. . .	7	12	*Ant. Denkm.* i. pl. 46, 4 = *J.H.S.* iv. pl. 31.
5. Brit. Mus . .	8	13	*Ibid.* pl. 46, 3 = *J. H. S.* iv. p. 20, fig. 15.
6. Brit. Mus. . .	9	13	*Ibid.* pl. 46, 5 = *J. H. S.* iv. p. 19, fig. 14.
7. Louvre . . .	10	11	*Bull. de Corr. Hell.*, 1890, pl. 6.
8. Louvre . . .	11	3	*Ibid*, 1892, p. 240.
9. Louvre . . .	12	1	*Ibid.*, 1895, pls. 1-2, p. 71.
10. Louvre . . .	13	2	*Ibid.*, 1895, p. 80.
11. Berlin . . .	1	8	*Ant. Denkm.* i. pl. 44.
12. Berlin . . .	2	9	*Ibid.* pl. 46, 2.
13. Vienna . . .	15	10	*Ibid.* pl. 45.
14. Smyrna . . .	14	14	*Ibid.* pl. 46, 1.
15. Constantinople .	3	7	*Mon. dell' Inst.* xi. pl. 53 = *J.H.S.* iv. p. 8 ff.
16. Constantinople .	4	4, 5	*Ibid.* pl. 54 = *J. H. S.* iv. p. 2 ff.
17. Constantinople .	5	—	*Röm. Mitth.* 1888, p. 163.
18. Constantinople .	6	6	*Revue des Études Gr.* 1895, p. 161.
19. ? . . .	16	—	*J.H.S.* iv. p. 15.
20. ? . . .	17	—	*J.H.S.* iv. p. 20.
21-3. In the market .	18-20	—	See *Revue des Études Gr. loc. cit.*

To which may be added :—

24. Brit. Mus., from Kameiros . .	—	—	*Terracotta Sarcophagi*, pl. 8.

[1] The following bibliography may be useful: *J.H.S.* iv. p. 1 ff.; *Bull. de Corr. Hell.*, 1892, p. 240 ff., 1895, p. 69 ff.; Murray, *Terracotta Sarcophagi in Brit. Mus.* p. 1 ff., and *id.* in *Monuments Piot*, iv. p. 27 ff.; *Revue des Études Grecques*, 1895, p. 161 ff.

We have seen in the course of this chapter the gradual evolution of Ionic vase-painting, from the time of lingering Mycenaean influences down to the period when it ceased to have any existence as a separate style, and having reached the same point of development as Attic vase-painting, was soon merged in the latter. It is probable, however, that this was largely due to political circumstances, which put an end to Ionic art and industry generally about the close of the sixth century. The conquest of Ionia by Harpagos in 545 B.C. was the event which led to this result, and consequently to the dispersion of Ionic artists, partly into Greece, partly into Italy. The migration of the Phocaeans in particular caused an influx of Ionian culture into the semi-barbarous regions of Italy, and contributed to the production of the imitative vase-fabrics to which allusion has been made.

M. Pottier, in summing up the rôle played by Ionian Greece in the history of art, regards it as the principal agent of transmission of culture between the East and Europe, and thus the true civiliser of Europe, influencing both Doric Greece and Etruscan Italy. Thus we may see in Ionia the parent of modern civilisation.

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CHAPTER IX

ATHENIAN BLACK-FIGURED VASES

Definition of "black-figured"—The François vase—Technical and stylistic details—Shapes—Decorative patterns—Subjects and types—Artists' signatures—Exekias and Amasis—Minor Artists—Nikosthenes—Andokides—"Affected" vases—Panathenaic amphorae—Vases from the Kabeirion—Opaque painting on black ground—Vase-painting and literary tradition—Early Greek painting and its subsequent development.

THE term "black-figured" is generally applied to the Athenian fabrics of a certain well-defined character and a comparatively restricted period, but in point of fact is strictly applicable to several of the classes already discussed, such as the Chalcidian and the later Corinthian and Ionian wares. It is, indeed, in some respects inadequate as a definition. We must remember that it was originally introduced at a time when the Greek vases in public museums consisted mainly of two classes—the one with figures painted in black silhouette on red ground, the other with figures drawn in outline and surrounded with black, so that they stand out in red. Between these two classes the terms "black-figured" and "red-figured" offered an obvious and useful distinction. By way of illustration, it may be advantageous to make a comparison between the two main varieties of black-figured Attic amphorae (see pp. 161, 221), as, for instance, they are grouped on the two sides of the Second Vase Room of the British Museum, and those with red figures in the Third Room. In the one class of black-figured amphorae the whole vase stands out in the natural red colour of the clay, whereas the red-figured amphorae are covered with black colour, so as to conceal the whole of the red of the clay except where it is left to fill in the contours of the figures. In other words, the one class, which we

may term "red-bodied" amphorae, are red all but the figures; the other class are black all but the figures. There is, however, an intermediate class, which no doubt suggested the arrangement of decoration on the red-figured amphorae (see below, p. 411), and which we may call "black-bodied" amphorae. Here the whole body of the vase is covered with *black* colour, except a framed panel, which is left in the red to receive the black figures. It is clear, then, that this second class of black-figured amphorae approaches more nearly in aspect to the red-figured, although it does not follow that they were necessarily a late or transitional development.

But in regard to our definition, it is necessary to reckon with the fact that there are not only vases of an earlier stage of art which have black figures painted on a (more or less) red ground, but that there are others in which the figures are painted not on red, but on a white slip. In particular we may instance the Cyrenaic vases and some of the Naucratite wares. We thus lose the sense of an exact contrast between black figures on red ground and red figures on black; and, moreover, the term acquires almost too wide a connotation to be of any value for a system of classification. The term "black-figured" must therefore be used to some extent conventionally, to denote a certain class of vases made at Athens during a certain period and with certain characteristics. The latter may be summarised as follows: (1) black varnish entirely filling in the contours of the figures; (2) red glaze (or white slip) employed as background; (3) details indicated by accessory pigments of white and purple, and incised lines; (4) subjects almost exclusively human and mythological figures.

The history of vase-painting in the middle of the sixth century B.C. is largely the history of a gradual centralising of that art in one place from a number of scattered local fabrics. This was mainly brought about by one cause—namely, the extraordinary advance in art and culture at Athens under the beneficent rule of the tyrant Peisistratos and his successors (565—510 B.C.). Previous to this time Athenian art was very limited in its scope, and in the domain of painting had so far produced nothing except the great Dipylon funeral vases, their immediate successors (the "Proto-Attic" wares), and the

"Tyrrhenian" vases, which, as we have seen, were largely under the influence of Corinth. Attic importations into Italy cannot be traced until the black-figure style is well developed.

The immediate result of this advance was to attract artists from all parts of Greece—not only from Corinth, whose power was now on the wane, but also from Ionia, whose artists were driven to seek refuge elsewhere by the encroaching conquests of the Persian monarchs. Thus we shall see that certain artists, like Amasis and Nikosthenes, infused a large amount of Ionic element into their productions, just as in others we see the influence, more or less marked, of Corinth. But one marked characteristic of the Attic sixth-century vases is the entire disappearance of Oriental influence.

At the head of the new development stands the famous François vase in Florence (Plate XXVIII.), to which allusion has been made already (p. 73). Its date can hardly be later than the middle of the sixth century, probably somewhat earlier, and the two artists Klitias and Ergotimos, who were responsible for its production, are among the earliest of whom we have any record at Athens. The alphabet of the inscriptions leaves no doubt that it is a purely Athenian work, and the technique is also purely Attic, as are some of the subjects; but there are not a few small points which betray the influence of a Corinthian artist, such as the arrangement in several friezes. The winged goddesses, Sphinxes, and animals are non-Attic, but not necessarily Corinthian. It is, however, chiefly interesting for its wealth of subjects, which are mentioned in another chapter (Chapter XII.); with these every available space is decorated. The style has been described as "dry, precise, and careful," the artist as "exact and well instructed." Closely related to this vase is one in the British Museum representing the Birth of Athena (B 147). Although the subjects (exclusive of those on the cover) are only two in number, the minuteness of treatment in detail and the richness of the composition show that it belongs to the same school.

In regard to technique, two points distinguish Athenian vases at all periods above other fabrics. Firstly, the admirable clay, traditionally obtained from Cape Kolias in Attica, and mingled

From *Furtwaengler and Reichhold.*

THE FRANÇOIS VASE IN FLORENCE.

with red ochre (*rubrica*) in order to produce its ruddy hue; this clay was eminently suited for taking a glaze, which was of course an essential preliminary for painting the surface. Next, the black varnish, with its exquisitely lustrous sheen, which was brought to a pitch of perfection in the subsequent period, and always affords such an admirable counterfoil to the red of the clay, though it has not been altogether popular with the modern photographer, owing to its reflecting qualities.

As regards the figures, they were seldom left entirely black, though black is at all times their prevalent aspect. The accessory whites and purples are used in varying degrees at different times, and it may be laid down as a general rule that purple is more affected on the earlier vases, white on the later. A like principle obtains with the accessories on red-figured vases. In the later examples, moreover, they are much more sparingly used, perhaps owing to the influence of the new technique, and by the end of the sixth century they disappear altogether. The more careful artists pay greater attention to the use of incised lines, and prefer to produce effects of richness and delicacy by elaboration of details and patterns in this manner.

At first there is a tendency to use purple in large masses, and even for the flesh of men; but it is generally employed for folds or portions of drapery, and for throwing up different parts of animals' figures, or of the decorative patterns, such as palmettes and lotos-buds. White is employed for the hair of old men, for rocks and details of buildings, for the long garment worn by charioteers, and above all for the flesh of women. The latter we have already seen (p. 317) to be an invention traditionally attributed to Eumaros, who probably lived about the middle of this century; but whether it was first introduced at Athens or Corinth is uncertain.

Throughout the period there is a steady advance in drawing, but more in the direction of carefulness and refinement than in accuracy and truthfulness to nature; that is to say, that it always remains conventional. We shall see later that, even after the red-figured style came in, a certain archaic stiffness still prevailed for a time, both in the old and new methods. On the other hand, there is a degenerate class of black-figured vases,

found chiefly on Greek sites, in which the drawing is free almost to carelessness, and it is clear that these illustrate the last efforts of the black-figured method in Greece in the fifth century; but the vases are all rough and hasty productions, altogether devoid of merit or interest.

The treatment of drapery may generally be regarded as a fair indication of date. The chiton is at first straight, with rigid stripes or casual patches of purple; then patterns are incised or painted in white; the waist is usually very small, and often bound tightly with a broad girdle.[1] By degrees the lines indicating the folds of the skirt take an oblique direction, as if to indicate motion, while the himation or mantle—which is adopted in addition by the women to wear over the chiton—is made to fall in long formal folds with diagonal edges, known as πτέρυγες. It is curious that the more advanced style of drapery is usually found on the red-bodied amphorae, the older types on the black-bodied. In the hydriae, which preserve the panel form of decoration throughout, a progress is visible from the most rigid severity to comparative freedom.

The **shapes** most frequently employed by Athenian potters are very limited in number—as, for instance, when compared with the Corinthian and other earlier fabrics. The really popular forms are limited to five: the amphora, hydria, kylix, oinochoe, and lekythos. Besides these we find the krater (usually with columnar handles), the deinos, the skyphos or kotyle (with its variant the mastos), the kyathos, the pyxis, and the pinax, and occasionally also the alabastron; but these are practically all. Some of these remain constant throughout, but others in their form and system of decoration present interesting varieties of development. In all cases there is an evident aim at improving upon the somewhat inartistic Corinthian forms, in the direction of grace, lightness, and architectonic symmetry.

The different types of Attic amphora have been described elsewhere (p. 160), but may be briefly recapitulated here.

(1) The so-called Tyrrhenian amphora, found in the Corintho-Attic and "affected" varieties, with elliptical body (Plates XXIII., XXIX.).

(2) The panel-amphora, with cylindrical handles.

[1] *E.g.* B 130 in B.M.

(3) The panel-amphora, with broad grooved handles (probably a later development) (Plates XXXI-II.).

(4) The red-bodied amphora, distinguished by its straight neck sharply marked off from the shoulder (Plate XXIX.).

(5) The Panathenaic amphora, with small mouth and foot and widely swelling body (Plates XXXIII-IV.).

(6) The *prothesis*-amphora, a tall, elongated type, used in connection with funeral ceremonies (see above, p. 159).

(7) The Nikosthenes type (Plate XXX.).

The hydria, oinochoe, and krater almost universally adhere to the panel form of decoration, but the lekythos is red-bodied. In none of these is there much change visible, except in the later hydriae, some of which assume the curvilinear form of the R.F. "kalpis" (see p. 166). The evolution of the kylix is, however, of considerable interest, especially in view of its subsequent importance.

Before the sixth century this form was unknown at Athens, its nearest equivalent being the skyphos, or deep two-handled bowl with low base. But in course of time two forms of the kylix make their appearance, one apparently earlier than the other, and probably derived from a Corinthian prototype. At Corinth the kylix took the form of a large shallow bowl, with bulging outline and flat lip, on a very low foot. This type was also known in Ionia, as at Samos and Naukratis. It was usually decorated with friezes, internal or external, sometimes with a Gorgon's head in the centre. The Athenians adopted this form, but raised it on a high stem, proportionately reducing its diameter (p. 190). At the same time they greatly reduced the surface available for decoration, either covering the whole with black varnish, except a narrow red band on the exterior, or else leaving the whole of the exterior red, but confining the figures strictly to the upper part. This became a very favourite fashion, and in course of time a school of painters arose whose practice was either to paint a row of diminutive figures (or even a single figure, as Fig. 96) on the upper band and sign their names below, or else to leave the cup quite plain except for the signature on one side and a motto on the other, such as *χαῖρε, καὶ πίει εὖ*, "Hail, and drink deep!"

These artists are known as the minor or miniature painters, and among them are found the names of Archikles and Glaukytes, Eucheiros, Hermogenes, Tleson, and Xenokles. At first they preferred not to decorate the interior, but then a small medallion with a figure of an animal or monster, such as a Sphinx, is introduced. Interior designs, however, were not at any time popular in this style.

The second type of kylix is purely Ionic in origin (see above, p. 357). It is distinguished from the others by the absence of a lip, by its low, thick foot, and by the greater width and shallowness of the bowl (p. 191). With a very slight modification it obtains throughout the red-figure period. Its form is clearly derived from the libation-bowl, or *phiale*, with the addition of foot and handles; and it appears first in Ionia in the large cups ornamented with eyes, the best of which is the Phineus cup in Würzburg (see p. 357). The Cyrenaic cup (see p. 341) seems to be half-way between the two types, having a high stem and a very slight marking off of the lip.

The introduction of this form into Attica was apparently due to Exekias, who belongs to the middle of the B.F. period, and has left a very fine specimen, decorated with the Ionic eyes and a beautiful interior design of Dionysos sailing over the sea (see p. 381). They are invariably red-bodied externally, and, in contradistinction to the other form, decorated all over, inside and out. Some of the larger varieties have an inner frieze surrounding the medallion[1]; but in many of the smaller examples the practice is to paint a Gorgon's face in the interior, leaving the rest black. On the exterior, not only are the Ionic eyes generally to be seen, but also the whole scene is filled in with a background of interlacing branches or foliage—a common characteristic of later B.F. vases, and supposed to be also Ionic in its origin.

From the shapes we pass to the decorative patterns on Athenian vases, which form a link with the important question of subjects. As the methods of disposing the main designs became fixed, so did the scheme of subsidiary decoration, until it almost became stereotyped. Thus on the neck of an amphora

[1] B.M. B 426.

there is always a pattern of double palmettes and lotos-buds (see Chapter XVI.), round the foot always rays or pointed leaves shooting upwards. The former seems to have been a Corinthian, or perhaps Chalcidian, invention; the latter is Ionic, and is found as early as the Rhodian vases. On the shoulder of the red-bodied amphorae is a "tongue"-pattern bordering the field of design above, and below the field are rows of maeander-pattern and lotos-buds, sometimes repeated. The characteristic ornament of this class is, however, the arrangement of palmettes and lotos-buds under the handles, which is often very delicate and artistically conceived. A variation is found in the works of Exekias, who replaces it by an elaborate system of spirals—a pattern which, as we have seen, descended from Mycenaean art, by way of the Melian amphorae, to Athens. In the panel-amphorae the only ornaments besides those of the neck and foot are those bordering the panels, usually along the top only, and, in the case of those with large flanged handles, on that part of the vase also. In the former case a band of lotos-buds, sometimes alternating with palmettes, is most commonly found; in the latter, rows of ivy-leaves or rosettes occur on the sides of the handles, and a palmette at the point of junction with the vase.[1]

In the hydriae the ornamentation consists of rays round the foot, with tongue-pattern on the top of the shoulder and round the handles; to this are added bands of ornament down the sides and along the bottom of the panel on the body. For the sides the favourite pattern is an ivy-wreath; but network is also used, and, on the inferior varieties, plain dots. Along the bottom the favourite device is a scroll of palmettes, often very artistic in character, the place of which is sometimes taken by a frieze of animals.

The same decorative principles are seen in the other shapes, but in a more limited degree. The ornament on a kylix is almost confined to palmettes springing from each side of the handles; but the interior designs are sometimes surrounded with tongue-pattern. The panels on the oinochoae are often bordered with ivy, network, or dots, as on the hydriae; on

[1] *E.g.* B 193-205 in B.M.

the lekythos the ornament is confined to a row of lotos-buds or palmettes on the shoulder.

Many vases of the B.F. period are decorated solely with these patterns; but these are usually small and insignificant specimens, with a band of palmettes or other pattern carelessly painted, perhaps used for the tomb by those who could not afford more elaborate specimens. In the tombs of Rhodes and Cyprus small amphorae and lekythi are often found, the bodies of which are covered with a plain network pattern in black on a red or white ground.[1] Others, again, seem to have been executed with great care, and there is a beautiful example from Vulci in the British Museum—a jug with a frieze of palmettes and scrolls on a white ground (B 632).

To treat of the **subjects** depicted on Athenian black-figured vases within a reasonable compass is not only well-nigh impossible, but unnecessary, since it would practically be to traverse the ground covered in another part of this work. There are, however, some general considerations which must not be passed over. While we bear in mind that they are as comprehensive in their character as those on any other class of Greek vases, it may not be amiss to point out in what respects they vary, for instance, from the red-figured Athenian vases or from those of the decadence.

The main point of difference is that in B.F. vases the mythological element on the whole predominates, whereas in the later periods it is fully counterbalanced, if not outweighed, by the preponderance of subjects from daily life. The Attic ephebos has not yet attained to the height of popularity which he reaches on the red-figure kylikes of Euphronios and Duris, and the softer side of Greek life, the life of the women's quarters, or the sentimental scenes of courting which begin to prevail towards the end of the fifth century, are the products of a later development of social conditions. Religion, it is true, does not maintain on the vases the overwhelming importance that it does in other branches of art, except in a few classes relating to certain cults; nor has the cult of the dead as yet found general expression. To what, then, do we

[1] *Excavations in Cyprus*, p. 76, fig. 139.

owe the preference for scenes from heroic legend, and the myths relating to the gods? It is, perhaps, largely due to the extreme conventionality of Greek art in the sixth century, which embodies its conceptions in a series of fixed *types*, which the artist repeats again and again from sheer inability to strike out a new line for himself. But with the general and rapid advance of artistic conception and technical power at the beginning of the fifth century, the change at once becomes apparent,—not, be it noted, with the beginning of the red-figure style, which for a time preserves most of the characteristics of its predecessor; but with the ripening of the powers of a Euphronios and a Brygos, who paved the way for the greater freedom and variety of conception exhibited in the highest products of fifth-century vase-painting. At the same time an ethical change is to be observed, especially in the position now occupied by two deities who are entirely absent from the B.F. vases—the god of love (Eros), and the goddess of victory (Nike). To the popularising of these two conceptions is mainly due the preponderance of the sentimental and athletic elements of the subsequent age.

To return to the black-figured vases, we must now devote a few words to the consideration of the feature to which allusion has just been made, namely, the conventionalised types and schemes of composition in which the various myths and other themes are portrayed. Roughly speaking, they fall into three classes: (1) subjects represented by one single and constant type[1]; (2) subjects represented by two or more distinct types[2]; (3) subjects which fall into two or more episodes, each represented by a different type.[3]

The question of the *origin* of these types is a difficult one to answer. They appear to have sprung, like the fully-armed Athena from the head of Zeus, in a matured form from the brain of the Athenian artist. It is, however, possible that the genius of some school of artists, such as those who con-

[1] As the Birth of Athena, *B. M. Vases*, ii. p. 11, and Fig. 113 (Chapter XII.).

[2] Herakles and the Nemean Lion, *ibid.* p. 13; Fig. 125 (Chapter XIV.) and Plate XXXII.

[3] Herakles and the Erymanthian Boar: see Fig. 126 (Chapter XIV.).

ceived the decoration of the chest of Kypselos or the throne at Amyklae, may have influenced the vase-painters to a great extent. We have already seen how closely the scenes on some later Corinthian vases adhere to the description of Kypselos' chest. It is also a curious fact that the simpler form of a type is not necessarily the older. Some early types are of a quite complicated or elaborate nature; and the only variation apparent in a particular type is that of the number of bystanders watching the event. This, again, is due to an accidental cause—namely, the surface available for the painter, who, perhaps unconsciously, took the architectural sculptures of a temple for his model, and where his space resembled that of a metope (as in the panel-vases) reduced the number of his figures to a minimum, or where it took the form of a frieze filled in the space with a convenient number of spectators, the original "type" being preserved as a constant quantity in either case.

A question which has always presented great difficulties to students of vase-paintings is one that to a certain degree arises at all periods, but more especially in the one under discussion—namely, the difficulty of deciding whether certain subjects have a mythological meaning or not. The difficulty is, of course, in the first instance, due to the type-system. If the artist wished to depict a marriage procession in daily life, he instinctively had recourse to a familiar scheme for the purpose—namely, the "chariot-procession" type consecrated to the marriage of Zeus and Hera and similar Olympian triumphs. Or, again, scenes of warriors departing to battle or engaged in the fray would naturally be copied from such familiar types as that of Hector parting from his wife and child, or the fight of Achilles and Memnon over the body of Antilochos. Even inscriptions do not lend the aid that might be expected, as in some cases they are wrongly applied, or the names convey no meaning (as on the Corinthian vases, see pp. 315, 318); and it is probable that in many cases the intention was just to produce a sort of parable or idealised picture of events of ordinary life, in order to give more interest to a theme.[1]

[1] See also on this subject Chapter XII. *init.*

Much of the interest of Athenian vases is derived from the inscriptions found upon them. These, which will be more fully dealt with elsewhere (Chapter XVII.), fall into three main classes—artists' signatures, names with καλός, and descriptive names referring to the designs. On the last-named head no more need now be said; the second is more appropriately dealt with in the next chapter[1]—although not a few καλός-names are found on B.F. vases; and it only remains therefore to treat of the artists whose signatures have come down to us.[2]

We have already met with a few signed vases, among those of Corinth and Boeotia, of which the earliest go back to the beginning of the seventh century. Those of undoubtedly Attic origin fall into three or four main groups, the representative names in which may here be given.[3]

(1) Early artists:
Klitias and Ergotimos, Taleides, Sophilos, Oikopheles.
(2) Middle period:
Amasis, Exekias, Kolchos, Nearchos, Timagoras, Tychios.
(3) Minor artists, who painted kylikes almost exclusively:
Archikles, Eucheiros, Glaukytes, Hermogenes, Phrynos, Tleson, Xenokles, Sakonides.
(4) Later artists, combining B.F. and R.F. methods, or painting in transitional style:
Andokides, Charinos, Nikosthenes, Pamphaios, Hischylos and Epiktetos, Pasiades.

Kittos, who painted in black figures a Panathenaic amphora of the later class (see p. 391), belongs to the middle of the fourth century.

Most of these artists use the formula ἐποίησε,[4] implying that the same man both made and painted the vase; but Exekias in two cases (see below) says ἔγραψε κἀποίησε. The François vase, as we have seen, records the names both of painter and artist.

[1] General reference may here be made to Klein's *Lieblingsinschriften*, 2nd edn.

[2] See *id.*, *Meistersignaturen*, 2nd edn., for full details.

[3] See also table at end of Chapter XVII., and Klein, *Meistersig.*[2] p. 32 ff. The principal examples of signed vases are illustrated in the *Wiener Vorlegeblätter*, 1888-91.

[4] A unique exception is the early Attic potter Oikopheles, who uses the word ἐκεράμευσε (Oxford 189 = *Ashmolean Vases*, *pl. 26*).

Some of these painters give the name of their father, and thus we learn that Eucheiros (Class 3) was the son of Ergotimos (Class 1), Tleson (Class 3) the son of Nearchos (Class 2). The names Andokides and Nearchos are found among the dedications on the Athenian Acropolis. We now proceed to speak of these artists in detail.

In Class 1 Sophilos appears as the maker of a vase of which fragments were found on the Athenian Acropolis.[1] In style it closely resembles the François vase, and its subject also appears to have been akin—the marriage of Peleus and Thetis—to judge from the figures of Horae still visible. Taleides, whose work is of early character, painted an amphora representing Theseus slaying the Minotaur and two men weighing goods in a balance.[2] Ergotimos, besides the François vase, signed a kylix found in Aegina, and now in Berlin,[3] with interior and exterior subjects.

In the next group are two very interesting names, those of Amasis and Exekias, and both demand special attention, the latter for the excellence of his work, the former as connected with a special branch of Attic B.F. vases, which must be treated by themselves. The vases of **Exekias** include four amphorae, four cups (see Fig. 96), and two fragments, together with a few unsigned vases which for various reasons may be attributed to him.[4] The finest of his works is an amphora in the Vatican,[5] on one side of which are Ajax and Achilles playing draughts, the one calling out ΤΕϟΑΡΑ "four!" the other ΤΡΙΑ "three!"[6] On the reverse are the Dioskuri, with Tyndareus and Leda. Besides the signature in iambic form

ΕϮϟΕΚΙΑϟ ΕΓΡΑΦϟΕ ΚΑΙ ΠΟΙΕϟΕΜΕ

Ἐξηκίας ἔγραφσε καὶ ποίησέ με,

the vase is inscribed with the *καλός*-name Onetorides. The others are in the British Museum (B 210), the Louvre (F 53), and Berlin (1720) respectively, and are all painted with mytho-

[1] *Ath. Mitth.* 1889, pl. 1.
[2] *Wiener Vorl.* 1889, pl. 5, 1.
[3] Reinach, ii. 120.
[4] *E.g.* B.M. B 211 (Plate XXIX.).
[5] *Wiener Vorl.* 1888, pl. 6, fig. 1.
[6] Cf. Ar. *Kan.* 1400: Βέβληκ' Ἀχιλλεὺς δύο κύβω καὶ τέτταρα.

1 2

ATTIC BLACK-FIGURED AMPHORAE (BRITISH MUSEUM).

1, IN STYLE OF EXEKIAS; 2, IN "AFFECTED" STYLE.

logical subjects. A fragment of a *deinos*[1] is interesting, as having, besides the signature, an iambic line in the alphabet of Sikyon (see Chapter XVII.). Among the four cups, one in Munich (339) is a masterpiece of its kind. It is of the later form of B.F. kylix (see p. 374), and represents on the inside Dionysos in a ship which takes the form of a fish, the mast and yard overgrown with the vine; on the exterior are large eyes and groups of warriors. The other three are of the earlier "Kleinmeister" type, and two are merely signed, without subject.

Exekias may be regarded as one of the most typical B.F.

FIG. 96. KYLIX BY EXEKIAS: "MINOR ARTIST" TYPE.

artists. His subjects are mostly from the usual stock-in-trade of the time, but distinguished above other examples by the care and accuracy displayed in every detail, especially in the extraordinary delicacy and minuteness of the incising and the judicious but sparing use of accessory colour, as also by the careful naming of the figures in almost all cases. He stands midway between Klitias of the François vase and the transitional work of Andokides and Pamphaios, and helps to carry on the tradition of minuteness and accuracy in detail characteristic of all these artists.

Amasis is an artist of similar calibre and temperament. His

[1] *Wiener Vorl.* 1888, pl. 5, fig. 3.

style is more individual than that of any B.F. artist, and hence it is possible to attribute to him many vases which he has not signed. It is marked, like that of Exekias, by accuracy of drawing and careful and delicate work in details[1]; but his subjects are more monotonous and his figures much more rigid and conventional. There is much in his vases which suggests a connection with Ionia, especially with the later fabrics discussed above (p. 356); and this point has been well brought out by Karo.[2] We have seven signed vases from his hand, of which

FIG. 97. PERSEUS SLAYING MEDUSA: FROM AN OLPE BY AMASIS (BRITISH MUSEUM).

no less than four are jugs of a characteristic form—a form not unknown in Ionic fabrics,[3] but usually found among the later Corinthian wares. It is of the form known as *olpe*, with the design in a panel, on the right side of the handle only. An example of his work is given in Fig. 97.

It has been thought by more than one writer that he must have been a foreigner. The name, of course, suggests Egypt,

[1] Adamek (*Unsignierte Vasen des A.*, p. 13 ff.) notes the use of fringed draperies as especially characteristic of Amasis. By this means he is enabled to trace several other vases to his hand.

[2] *J.H.S.* xix. p. 143.

[3] Cf. A 1532 from Naukratis in B.M.

and his Ionic affinities would further suggest Naukratis or Daphnae as his home; but he may well have come from Asia Minor.[1] His best-known work is the fine amphora in the Bibliothèque Nationale at Paris (222), with a representation of Athena and Poseidon, and among the *olpae*, one in the British Museum (B 471), with Perseus slaying Medusa (Fig. 97), and one in the Louvre (F 30), with Herakles' reception by the Olympian deities.[2]

Of the other artists in this group, Nearchos is only represented by a fragmentary vase from the Athenian Acropolis[3]; Timagoras was the artist of two fine hydriae in the Louvre (F 38-9), one representing Herakles wrestling with the fish-bodied Triton; Tychios has also signed a hydria; Kolchos is only known from one vase, but that a very fine jug with the combat of Herakles and Kyknos (Berlin 1732). The design on the last-named is not, as usual, confined to a panel, but is continued all round the body.

The list of "Kleinmeister," or minor artists, is a long one,[4] but few individual names are of importance. The most prolific is *Tleson*, whose name appears on no fewer than forty cups, fourteen of which have no design, but only the signature on either side. Others have a design in the interior only, such as a Sphinx or Siren; others, again, a figure of an animal—a cock, hen, or ram—on either side above the signature. Seventeen are ascribed to *Hermogenes*, nine with signature only, and thirteen to *Xenokles*, of which eight have no design. But that Xenokles sometimes had larger aims is shown by two

[1] Loeschcke and Karo connect him with Samos, *J.H.S.* xix. p. 143.

[2] See on Amasis, Klein, *Meisters.* p. 43; Adamek, *Unsignierte Vasen d. A.* (*Prager Studien*, Heft v.); Karo, in *J.H.S.* xix. p. 135 ff.; Loeschcke in Pauly-Wissowa's *Lexikon*, *s.v.* Other vases signed by Amasis are: Reinach, i. 359, 1 and 453, 3; *Boston Mus. Report*, 1903, No. 45 (fragment of cup with eyes); Würzburg, iii. 384; and one mentioned in *Jahrbuch*, 1896, p. 178, note 1. Unsigned vases attributed to him by Adamek, Karo, and other writers are B.M. B 53, B 151, B 197; Louvre F 25, F 26, F 28, F 36; Berlin 1688-92, 1731; Munich 75 and 81; Adamek, *op. cit.* pls. 1, 2 (Berlin); *Mus. Greg.* ii. 3; *J.H.S.* xix. pl. 5 (Würzburg); Reinach, i. 513, 1-5 (Athens); and two others mentioned *J.H.S.* xix. p. 139, Nos. 11, 12.

[3] *Wiener Vorl.* 1888, pl. 4, fig. 2. But see also *Bull. de Corr. Hell.* 1896, pls. 6-7, p. 372.

[4] Klein, *Meistersig.* p. 72 ff., reckons seventeen, to which number two or three must be added.

of the cups in the British Museum and the Deepdene collection, as well as by an oinochoe which he made for the painter Kleisophos to decorate. The Museum cup (B 425) has on one side the three cosmic deities Zeus, Poseidon, and Hades; on the other a subject of four figures which may be interpreted as the return of Persephone from Hades. The Deepdene cup[1] has in the interior the procession of the goddesses to the Judgment of Paris, and on the exterior Herakles with Kerberos and Achilles' pursuit of Troilos. *Phrynos*, an artist of similar style, has one cup (B.M. B 424) with the Birth of Athena and the reception of Herakles in Olympos, the figures being very diminutive, as are those on the British Museum Xenokles cup. *Eucheiros* and *Sakonides*[2] show a preference for a female bust painted in outline on either side of the cup, as does also Hermogenes.[3] *Archikles* and *Glaukytes* are associated on a fine cup in Munich (333), which is remarkable for the number of figures each side, the style being very minute and detailed. On one side is Theseus slaying the Minotaur, on the other the hunt of the Calydonian boar, appropriate figures being added each side to fill in the spaces at the ends of the friezes. There are seventeen figures in the first scene, and, exclusive of animals, nine in the latter. A similar cup in the British Museum (B 400), with continuous frieze, representing a battle (twenty fighters, three chariots), is signed by Glaukytes alone. Other names are Anakles, Charitaios, Ergoteles, Epitimos, Myspios, Neandros, Psoicas, Sokles, Sondros, Thrax, and Tlenpolemos.

In the fourth class we are introduced to a very interesting personality, that of **Nikosthenes,** the most prolific of all Greek vase-painters known to us, and of the B.F. artists by far the most original.[4] He was, however, a potter rather than a painter, and on many of his vases the designs are little more than decorative motives. He favoured vases of metallic form,[5] such as the *phiale*

[1] Klein, *op. cit.* p. 81, No. 13.

[2] For a recently-discovered kylix painted by Sakonides, with Kaulos (?) as potter, see *Notizie degli Scavi*, 1903, p. 34.

[3] See *Arch. Zeit.* 1885, p. 189.

[4] Most of his vases are illustrated in the *Wiener Vorlegeblätter* for 1890-91.

[5] See Loeschcke in *Arch. Zeit.* 1881, p. 35. He may have imitated Etruscan bronze jugs, which were now being imported. The Berlin vase (Fig. 136, Chapter XV.) seems to be an imitation of the early Cyprio-Phoenician metal bowls (*ibid.*).

VASES BY NIKOSTHENES (BRITISH MUSEUM).

mesomphalos, and invented a peculiar type of amphora, also derived from a metallic origin, with broad, flat handles and slim body, with moulded rings dividing the subjects (see Plate XXX.). Altogether, seventy-eight examples with his signature are known, of which forty-eight, or nearly two-thirds, are amphorae, nineteen are cups, four jugs, and one a krater. To these must be added two cups in mixed B.F. and R.F. technique, one made for Epiktetos, and three kanthari in the R.F. method, of which he was probably only the potter. That he had affinities with the "minor artists" is shown by his making a cup with Anakles, as also by the style of some of his paintings[1]; while some of his cups have only the signature.

The amphorae are all very much alike, with subjects of a simple character—Sphinxes and Sirens, combats of warriors or boxers, Satyrs and Maenads dancing, and Herakles with the Nemean lion, a subject of which he seems to have been especially fond. The large krater in the British Museum (B 364) is interesting as an early example of the form with volute handles, and for the manner of its decoration, with a narrow band of minute figures on the neck only. In the Louvre there are two elegant jugs representing the reception of Herakles in Olympos (F 116-17), the figures being painted on a white slip in the Ionic manner.[2] This point is important, because it has been held by many writers that Nikosthenes was of Ionian origin, and introduced the white-slip method at Athens. Attempts have even been made to connect him with Naukratis. The jug figured on Plate XXX. is similar to those in the Louvre, and is probably also Nikosthenes' handiwork.[3]

Whether this view can be maintained or not, there is no doubt that towards the end of the sixth century the practice of using a white slip does appear at Athens for vases with black figures, and it is quite reasonable to associate its introduction with a versatile and original artist like Nikosthenes. But the consideration of this style of painting must be reserved for a later page (p. 455).

[1] *E.g.* B.M. B 364.

[2] Loeschcke (*Arch. Zeit.* 1881, p. 36) has pointed out that these are the most archaic examples of the Attic white-ground vases.

[3] Fig. 2 on Plate XXXV. is also his work.

Pamphaios and Epiktetos, with their associates Hischylos, Pheidippos, and Chelis, must, on the whole, be regarded as belonging to the R.F. period, the majority of their works being purely in that style; they will therefore be considered under a subsequent heading. But the case of the remaining name in our fourth class, that of **Andokides,** is somewhat different. Among the signed examples we have from his hand only one is purely B.F., three are in mixed style, and two are purely R.F. It is clear, then, that he represents, better than any other artist, the intermediate stage between the two styles, more especially as a whole series of amphorae can be attributed to him in which the two are combined, sometimes in what has been called "bilingual" fashion—that is to say, that the design on both sides of the vase is identical, except for the variation of technique.[1]

There are, then, six vases signed by Andokides, of which one is a kylix, the rest amphorae with designs in panels and broad grooved handles. The B.F. amphora represents a chariot seen from the front, in very minute, careful style.[2] One of the "mixed" amphorae (Louvre F 203) has three Amazons preparing for battle (B.F.), and women in the bath, one of whom is swimming, another diving (R.F.)[3]; the other, a Dionysiac B.F. scene, and Apollo, Artemis, Leto, and Ares on the R.F. side. The "mixed" kylix[4] is a remarkable example of the counter-changing principle, the two halves of the exterior being exactly reversed in technique, the dividing-line passing under the handles.[5] Of the two R.F. amphorae, one in Berlin represents the contest for the tripod and a pair of wrestlers; the other, in the Louvre, a combat and a musical contest.[6]

The characteristics of Andokides' work are freedom of composition, delicacy of drawing,[7] and wealth of detail; but he is always bound by conventionalities, and his power of observation

[1] Perhaps the nearest analogy is the "counterchanging" of heraldry.

[2] *Burlington Fine Arts Club Cat.* 1888, No. 108; 1903, No. 21, p. 102.

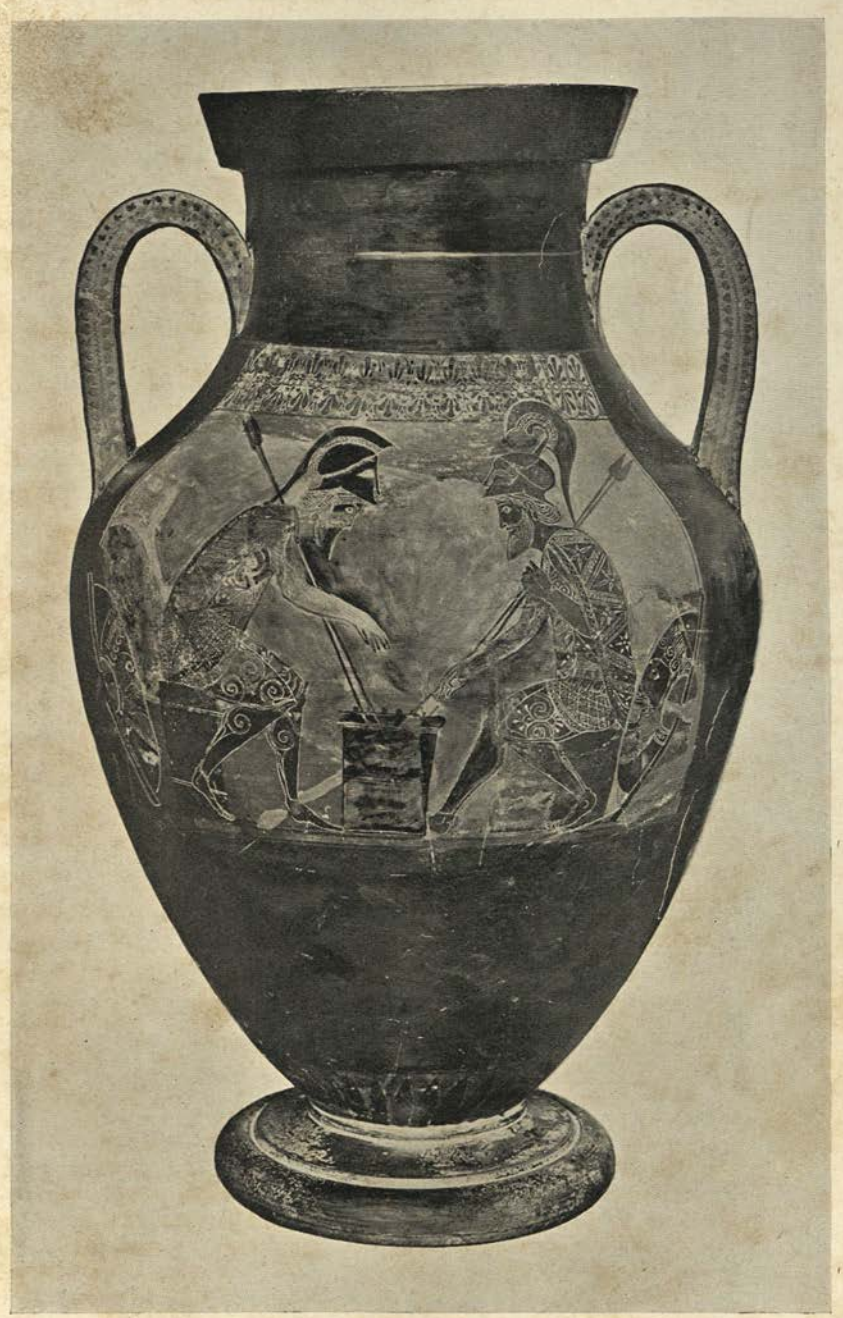
[3] See on the curious technique of this design *Ath. Mitth.* 1879, p. 290, note 4.

[4] *Jahrbuch*, 1889, pl. 4.

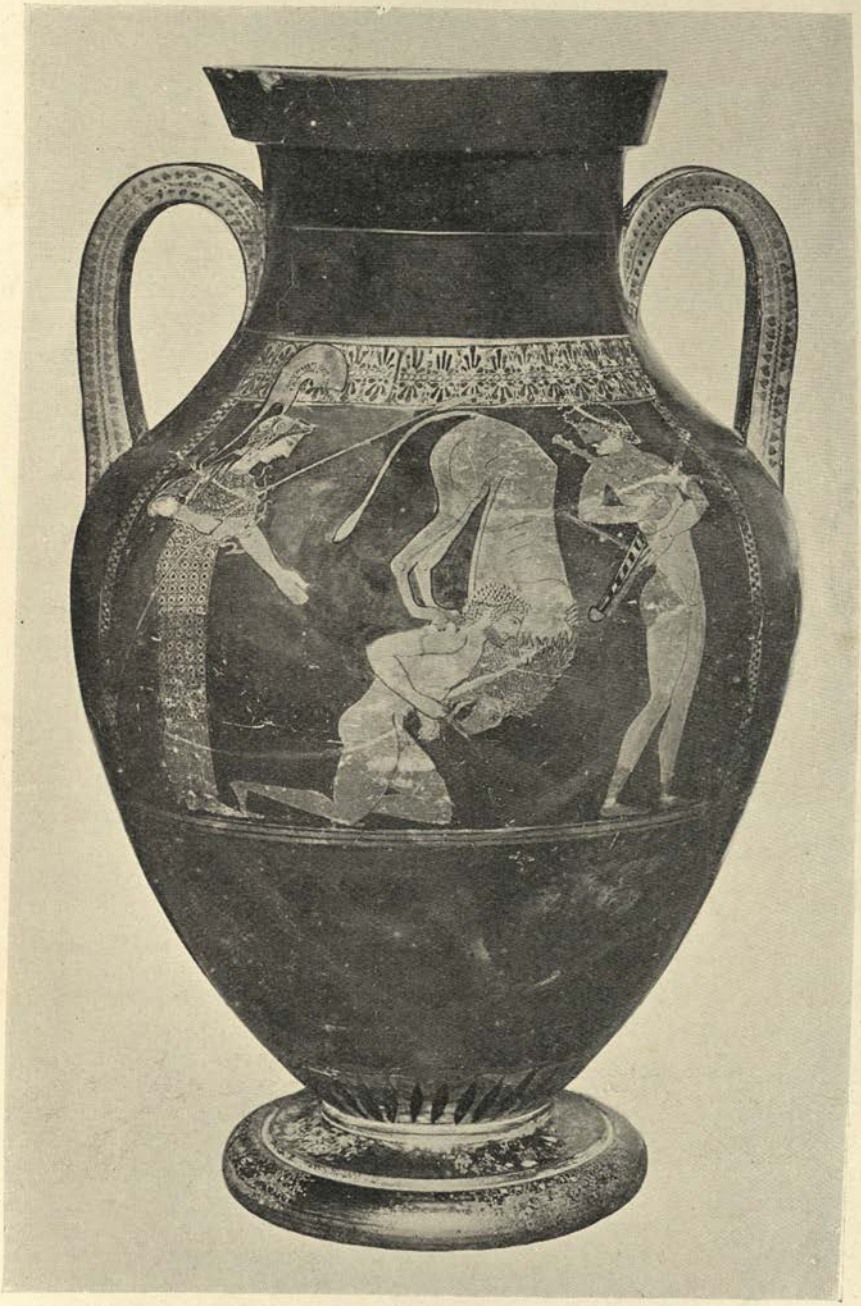
[5] Note especially the treatment of the large eyes in either case.

[6] See on all these vases *Amer. Journ. of Arch.* 1896, p. 1 ff.; also Furtwaengler and Reichhold, *Gr. Vasenm.* p. 15 ff., and *Jahreshefte*, 1900, p. 69.

[7] On his technique see *Jahrbuch*, 1899, p. 157, and Furtwaengler and Reichhold, *op. cit.* p. 19 ff.



AMPHORA IN STYLE OF ANDOKIDES (BRITISH MUSEUM).
OBV. : HEROES PLAYING DRAUGHTS.



AMPHORA IN STYLE OF ANDOKIDES (BRITISH MUSEUM).
REV. : HERAKLES WITH NEMEAN LION.

is stronger than his power of correct delineation. Furtwaengler thinks his combinations of B.F. and R.F. were deliberately chosen to show the superiority of the latter.[1] His date may be placed about 525 B.C., and it is probable that his name appears on a marble base found on the Acropolis of Athens. He seems to have learnt his art either from Exekias or Amasis, probably the latter.

Scholars are generally agreed in attributing to him the series of "bilingual" amphorae already mentioned, of which the most notable examples are one in Munich (388) representing Herakles banqueting, and one in Boston with Herakles and a bull.[2] Even more probable is the attribution to his hand of some half-dozen amphorae of the type which he employed, with *different* designs on either side, but B.F. and R.F. respectively. The most interesting of these is an amphora in the British Museum (B 193 = Plates XXXI.-II.), with the typical B.F. representation of warriors playing with *pessi* on one side, quite in the manner of Exekias (see above), and on the other Herakles with the Nemean lion, in which scene the painter has attempted a new departure. The lion is already subdued, and the hero carries it in triumph on his shoulder, no doubt with a reminiscence of the Erymanthian boar types (see Chapter XIV.).[3]

A curious group of B.F. vases found exclusively in Italy, and belonging apparently to the middle of the sixth century, is marked by the extremes to which the mannerisms of the artists Exekias and Amasis are carried. They are without exception amphorae, and so similar in style that they must all have been produced by one workshop, if not one hand. In spite of the excellence of technique and careful drawing which they exhibit, showing a really advanced stage of B.F. vase-painting, they are lifeless and monotonous almost to grotesqueness. Karo, in publishing the series,[4] reckons forty-four in all, and points out the various

[1] *Op. cit.* p. 17.

[2] A third example is given in *Amer. Journ. of Arch.* 1896, pp. 40-41 (with warriors playing dice).

[3] The other examples are Munich 373, 375; Louvre F 204; a vase in Bologna (*Amer. Journ. of Arch.* 1896, pp. 18, 19); and one in Würzburg.

[4] *J.H.S.* xix. p. 147 ff. See also B.M. B 149-53; Gsell, *Fouilles de Vulci*, pls. 7-8, p. 502.

Ionian peculiarities they present, which mark them either as an offshoot of the school of Amasis or a parallel development. Originally known as "Tyrrhenian," from the form of the amphora (cf. p. 160), they are now generally spoken of as "affected amphorae," in allusion to their peculiar and mannered style. An example is given on Plate XXIX.

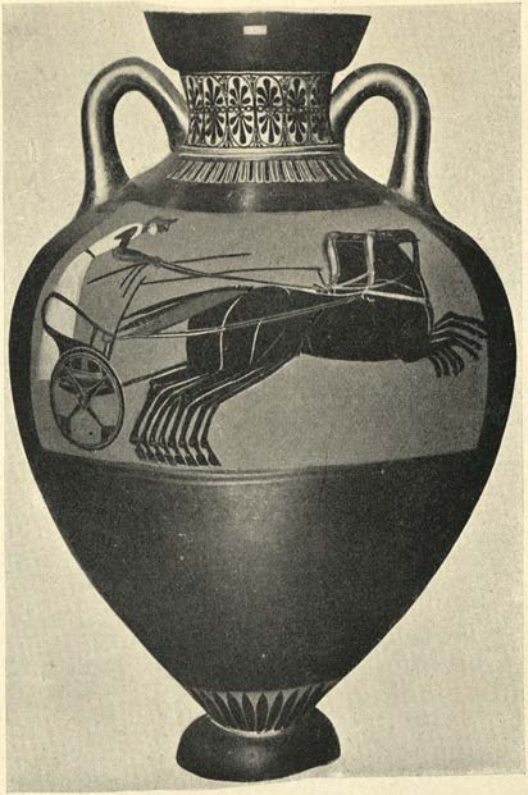
The subjects are all dull repetitions of certain "types," often without any apparent meaning, the personages being usually warriors, horsemen, or ordinary draped figures, young and old. Women are rarely seen; subjects of a Dionysiac character are occasionally found, but mythological scenes never, except that the "type" of the "Birth of Athena" is borrowed, copied, and divested of all meaning by omitting the figure of the goddess and depriving the others of their attributes.[1] In addition to this, Karo notes six prevailing motives: (1) two men in animated discourse, occurring about forty times; (2) a warrior arming, putting on a greave; (3) a warrior conversing with another man, with spectators; (4) two warriors in combat; (5) a young rider with second horse (Troilos?); (6) a reception of a guest, sometimes, but rather doubtfully, identified as Ikarios receiving Dionysos (see Chapter XIV.).

The complete absence of inscriptions is an Ionic feature, as are the ornamental patterns, such as the tongue-pattern round the handles; the fondness for winged figures also points in this direction. The combination of good technique with feeble compositions points to a late and imitative stage, and is contrary to the Attic tendency to prefer new ideas and new subjects to a high standard of technique. Among other characteristic details we may note the tendency to give the human figures tapering extremities, common to all archaic art, but here greatly exaggerated; also the elaborate ornamentation of the draperies with purple and white flowers or rosettes.

The **Panathenaic amphorae**, of which some mention has already been made elsewhere (pp. 48, 132), form one of the most interesting groups of black-figured vases.[2] The Panathenaic

[1] *E.g.* B.M. B 149, 157.

[2] See generally C. Smith in *Brit. School Annual*, 1896-97, p. 187 ff.; and for a bibliography, Urlichs, *Beiträge*, p. 33.



PANATHENAIC AMPHORA (BRITISH MUSEUM).

EARLIER TYPE (OBV. AND REV.).

games, which were celebrated in the third year of each Olympiad, were traditionally attributed to Theseus, but at any rate were reconstituted by Peisistratos about 566 B.C., when rhapsodic contests were introduced. To these musical contests with flute and lyre were added in 456 by Pericles. The prizes were, as we know from Pindar, painted amphorae containing olive oil, and there is an interesting inscription[1] which gives the number assigned as prizes for each contest. Thus, for the pentathlon, the first prize was 40 amphorae, the second 8; for the chariot-race, the first 104, the second 40; for the foot-race, the first 50 to 60, the second 10 to 12.[2] That these vases were greatly valued and buried in tombs we know from the number found under such circumstances. About 130 in all are in existence.

The shape of the sixth-century amphora is peculiar, but not exclusively used for this class[3]; in height they vary from twenty-five inches to about eight inches. Towards the end of the century, and during the fifth, other forms were sometimes employed, that of the red-bodied amphora and even the "Nolan" being found. In the fourth century a great change took place, the height being greatly increased and the body becoming proportionately slim; the form exactly resembles that of the contemporary Apulian sepulchral amphorae (Fig. 30, p. 162), with the addition of a conical cover. After the end of the fourth century they appear to have been made only of metal, but that they continued to be made we know both from literature and monuments, such as the Athenian coins.

The designs are always in panels, the obverse representing the goddess to whom the games were sacred, in her character of Athena Promachos; the reverse, the contest in which the prize was won (see Plates XXXIII.-IV.). Athena is represented standing to the left, with crested helmet, spear raised aloft in right hand, and shield on left arm, adorned with an emblematic device; her drapery is usually much ornamented. Except

[1] *Inscr. Gr.* ii. (*Atticae*) pt. 2, No. 965.

[2] It is not likely that all of those given as prizes were painted. On the other hand, the number of the amphorae may denote the number of measures of oil given, the painted vases being, like modern silver cups, symbolical and honorific (C. Smith, *loc. cit.*).

[3] See p. 160 for a description.

in the earliest examples there is a Doric column on either side of her, surmounted by a cock, as the bird sacred to Agon, the god of athletic contests; sometimes in place of it a Sphinx, Siren, panther, or vase. In the fourth century we sometimes find a figure of Nike or Triptolemos in his car surmounting the columns. Down the side of the left-hand column is usually placed the inscription (always preserving an archaic form): ΤΟΝ ΑΘΕΝΕΘΕΝ ΑΘΛΟΝ *τῶν Ἀθηνῆθεν ἄθλων*, "(a prize) from the games at Athens." On the earliest known, the Burgon amphora (B.M. B 130), the word ΕΜΙ is added. In the fourth century the inscription still reads down the side of the column, but the letters are placed parallel to it, not at right angles. Further, in this period it often becomes customary to add on the right-hand side the name of the archon in whose year of office the games were held, thus enabling us to date the vase exactly.[1] Of these, some ten examples are known, ranging from 367 to 313 B.C., the list being as follows:—

Polyzelos ...	367 B.C.	B.M. B 603	... Found at	Teucheira, Cyrenaica
Themistokles	347 „	Athens Mus.	... „	Athens
Pythodelos ...	336 „	B.M. B 607 and 608	„	Cervetri
Nikokrates ...	333 „	B.M. B 609	... „	Benghazi
Niketes ...	332 „	B.M. B 610	... „	Capua
Euthykritos ...	328 „	B.M. B 611	... „	Teucheira
Hegesias ...	324 „	Louvre	... „	Benghazi
Kephisodoros	323 „	Louvre	... „	Benghazi
Archippos ...	321 „	Louvre	... „	Benghazi
Theophrastos	313 „	Louvre	... „	Benghazi

The contests represented include the pentathlon, chariot-race, foot-race, armed foot-race, torch-race, tilting on horseback, the *παγκράτιον*, and musical contests (see Chapter XV., § 4).

The black-figure method is preserved throughout, in spite of the development in drawing, that of the fourth-century vases being perfectly free. In the latter there is a lavish use of white

[1] A fourth-century fragment at Athens has the name of the agonothetes instead of the archon: *ἀγωνο]θετοῦ(ν)το[ς τοῦ δεῖνος*. See *Brit. School Annual*, 1896-97, pl. 16 (*b*).

PANATHENAIC AMPHORA (BRITISH MUSEUM).
LATER TYPE (OBV. AND REV.).

and purple for details, especially on the figure of Athena; and Nike, when present at the contests, is usually painted white; but the tendency of later vases to neglect the reverse at the expense of the obverse in the matter of decoration is strongly manifested. The figure of Athena becomes greatly elongated, until her head is actually painted on the neck of the vase, and in all the vases after 336 B.C. she is turned to the right instead of the left. Two signatures of artists are found—Sikelos in the fifth century, Kittos in the fourth. There also exist some miniature fourth-century examples of these vases, the purpose of which is not obvious; on the reverse of one in the British Museum is represented a runner in the torch-race.[1]

A peculiar local development of the black-figure style is to be seen in the vases found on the site of the temple of the Kabeiri, near Thebes, in Boeotia. From the style of the painting, which is free and careless, they can hardly be earlier than the fifth century, and may be later, the old style being preserved, as in the Panathenaic amphorae, for religious reasons. The site was excavated in 1887–88, and yielded a large number of vases and fragments, together with Attic R.F. and plain black glazed wares. Of the local fabrics the majority are of a Dionysiac character, or have reference, more or less direct, to the cult of the Kabeiri; many bear dedicatory inscriptions to the presiding deities, such as *τῷ Καβίρῳ* or *τῷ παιδὶ καὶ τῷ Καβίρῳ*, etc.

The material is a reddish-yellow clay of good quality, on which the designs are painted in a pigment varying from yellow-brown to the deep lustrous black of the best Attic vases. Occasionally details in white or purple are added; incised lines are used only for inner markings as a rule. The shapes are confined almost entirely to one, a large deep bowl with two small ring-handles, to which are attached projections for the support of the fingers; it comes nearest to the *pella* described by Athenaeus (see p. 186). The decorative motives are simple—vine-wreaths, ivy-wreaths, myrtle and olive, and

[1] *J.H.S.* xviii. p. 300.

the wave-pattern; sometimes the reverse is only ornamented with a pattern of this kind.[1]

The subjects are interesting from the fact that they are an early instance (in vase-paintings) of intentional caricatures or grotesques; this is shown not only in the manner of treating the themes selected, but in the rude character of the drawing. Among those drawn from myth and legend may be mentioned Odysseus with Kirke (two instances) and traversing the sea on a raft; Peleus bringing the young Achilles to Cheiron (Fig. 98); Kephalos hunting a fox; and Bellerophon slaying

FIG. 98. VASE FROM TEMPLE OF KABEIRI: PARODY OF ACHILLES AND CHEIRON (BRIT. MUS. B 77).

the Chimaera. A favourite subject is that of Pigmies in combat with cranes. But the most interesting is one which represents the deity Kabeiros (answering to Dionysos) with his son (Pais, *i.e.* Iacchos) at a banquet, accompanied by three symbolical figures—Mitos, Pratolaos, and Krateia. Another fragment shows a train of worshippers approaching the Kabeiros, in the manner of the Asklepios reliefs.[2]

[1] Riegl, *Stilfragen*, p. 176, notes the absence of all the usual B.F. patterns. The ivy-wreaths represent an old Boeotian tradition.

[2] See *Ath. Mitth.* 1888, pls. 9-12; *J.H.S.* xiii. pl. 4, p. 77 ff.; B.M. B 77-8.

The transitional stage from black to red figures is illustrated by more than one class of vases. Those in which the two methods are united on one vase have been discussed elsewhere, in considering the characteristics of the artists who used both. But there is another class corresponding to neither method, and yet partaking of the character of both, in which the figures are painted in opaque red or white pigment laid directly on the surface of the vase, which is covered throughout with black varnish (Plate XXXV.). Inasmuch as the method of painting in colours is more suggestive of the B.F. vases, they are classed therewith in some collections, as in the British and Athens Museums; but since their appearance and style link them more closely with the R.F. period, they are found in others, as at Berlin, ranged with the latter class. In any case they form a distinct group, in which the earlier examples correspond more with the B.F., the later with the R.F., vases. They are undoubtedly of Athenian origin, but to what extent they affected the change from black to red figures is doubtful.

The practice of laying colours on the black varnish is, of course, one that was quite familiar to B.F. artists; the analogous procedure in the R.F. period was the laying of black pigment on the red glaze, as was necessarily done for details such as devices on shields. The transition was therefore easy in the case of a vase covered with black varnish, to painting the figures only in the opaque colours upon it, thereby enlarging the scope of the process. The incised lines in which the figure was necessarily sketched out before painting (and which frequently occur in this class) led the way to the process by which the R.F. artist engraved his design on the red clay *before* covering the rest of the vase with varnish. In the case of female figures it is obvious that this method was already practised, especially in scenes in which they appeared entirely nude, and the whole figure was painted white over the black silhouette, the black becoming the real accessory where it was required for the hair, etc.[1]

Dr. Six, who has studied this class, gives a list of about seventy examples,[2] including one signed by Nikosthenes

[1] Six (see next note) quotes the Berlin vase, 1843 = *Él. Cér.* iv. 18, in illustration of this.

[2] *Gaz. Arch.* 1888, pp. 193 ff., 281 ff.

(Plate XXXV., fig. 2 = F 114 in the Louvre) which has a figure of a woman painted in white each side, the style, be it noted, being purely black-figured. In later specimens the object seems to have been to imitate the appearance of the R.F. vases, and to paint the figures in a similar but opaque red colour instead of white.[1] Other examples again have figures only incised on the black, without any addition of colour.[2] In some of the earlier ones the use of black as an accessory[3] shows that the painter, so to speak, "thought" in the B.F. style, but used white for black and *vice versa*.

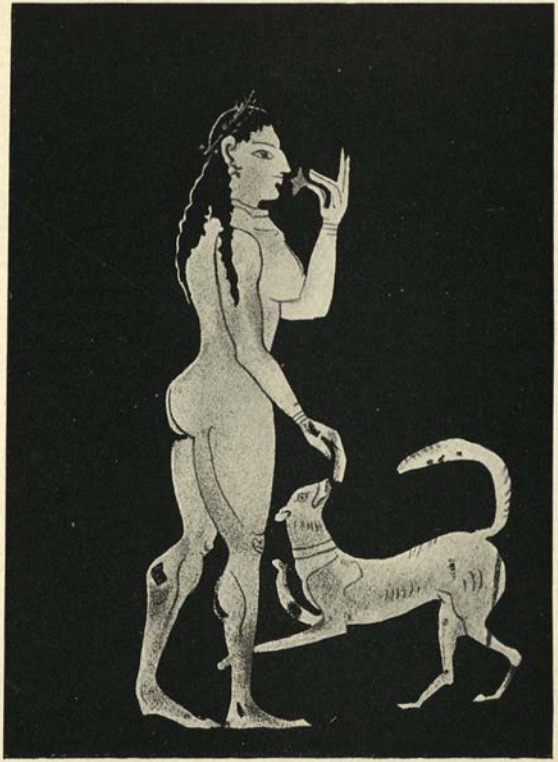
Most of the earlier examples have been found in Greece or Magna Graecia; they are usually of the lekythos form, which is always rare in Etruria. The later group chiefly consists of small bowls (*phialae*) of very negligent style, but some are of the typical R.F. forms, such as the "Nolan" amphora and the stamnos. A considerable number of fragments were found on the Acropolis of Athens, showing that even these late imitative specimens, in spite of their rude, careless execution, cannot be placed later than 480 B.C.

One of the most interesting examples is a fragment found on the Acropolis of Athens,[4] with an owl within an olive-wreath; it had been dedicated to Athena by a potter whose name is now lost. There is also a good series in the British Museum (B 681-700), including a lekythos with Odysseus carried under the ram, painted in polychrome.

Before embarking upon the history of the red-figured vases it may be well to endeavour to see what light the vase-paintings up to this point throw on the literary traditions preserved for us, chiefly by Pliny, in regard to early painting. There is, perhaps, no subject which that writer has treated with greater vagueness; and we are forced to the conclusion that he really knew nothing about it, and did not comprehend the meaning of the earlier writers from whom he

[1] *E.g.* B.M. B 691, 700.
[2] Cf. *Mus. Ital.* ii. pl. 3 = De Witte, *Coll. à l'Hôtel Lambert*, pl. 3.
[3] Cf. B.M. B 693.
[4] Six, *op. cit.* pl. 29, fig. 9.

1



2

VASES WITH OPAQUE DESIGNS ON BLACK GROUND.

1, BRIT. MUS. ; 2, BY NIKOSTHENES, IN LOUVRE.

borrowed.[1] Still, it may fairly be supposed that the names he mentions are those of real persons, even if his account of their achievements is vague or imaginary. There are also a few stray items of information given by Aristotle, Aelian, Strabo, and Athenagoras.

Pliny[2] begins by attributing to Corinth or Sikyon the discovery of the possibility of producing figures by outlining shadows, as in the story of Butades (p. 110). The next stage, he says, was to fill in the outlines with single colours, or monochrome. He next states that Philokles, an Egyptian,[3] and Kleanthes of Corinth "invented linear painting," and that they were followed by Aridikes of Corinth and Telephanes of Sikyon, who, still without using any colours, introduced inner markings and details,[4] and inscribed names over their figures. Ekphantos of Corinth introduced the use of a red wash, employing a pigment made from pounded pottery (*testa trita*),[5] which may represent the purple so lavishly employed on Corinthian vases. A later development was that of monochrome painting—*i.e.* the use of a single flat body-colour—introduced by Hygiainon, Deinias, and Charmadas.

Aristotle, on the other hand, speaks of Eucheiros of Corinth as the "inventor of painting." The name reminds us of the tradition of Demaratos, who took with him from Corinth to Etruria a craftsman of that name. It is also interesting to note that the name is borne by an Athenian kylix-painter (see above, p. 384), the son of Ergotimos, who made the

[1] His chief source was Xenokrates of Sikyon, about 280 B.C.: see Jex-Blake and Sellers, *Pliny's Chapters on Greek Art*, p. xxviii; Münzer in *Hermes*, xxx. (1895), p. 499 ff.; *id.*, *Beitr. zur Quellenkritik der Naturgeschichte des Plinius* (1897).

[2] *H.N.* xxxv. 15: see *ibid.* 56.

[3] Probably an inhabitant of Naukratis, and connected with the Ionian school of painting. See Smith, *Dict. Antiqs.*[3] ii. p. 401; Pottier, *Louvre Cat.* ii. p. 582.

[4] As opposed to mere silhouettes, *e.g.* of the Dipylon vases. Some writers take the words (*spargentes lineas intus*) to refer to ground-ornaments (see above, p. 312).

[5] On the possible connection of Ekphantos with Melos, see above, p. 312. Studniczka's argument rests partly on the early use of red on the Melian vases. In reference to the use of the word γρόφων in the Melian inscription, he thinks that the column supported a votive painted pinax or vase. For *testa trita* see Blümner, *Technologie*, iv. p. 478 ff.

François vase. Possibly he may have been the grandson of the Corinthian artist.

Strabo (viii. 343) and Athenaeus (viii. 346 C) mention a picture by Kleanthes (see above) which represented the Birth of Athena,[1] and can hardly have been later than the seventh century—a period to which such evidence as we have would allot the series of artists already named.

It must be borne in mind that the names of these early artists are those of draughtsmen, not of painters. Even in the time of Polygnotos drawing was the chief aim of all artists—as the red-figured vases amply testify—and painting, as we regard the art, only came into existence after the middle of the fifth century. The development from *liniarem*, or "outline-drawing," to monochrome at first sight presents a difficulty, as it seems to be opposed to the evolution of vase-painting, which is from silhouette (as in the Dipylon ware) to outlines (as in the Ionic vases). But even if it is not always intelligible, we can still observe a distinct continuity in Pliny's account.[2]

After Ekphantos had introduced the filling-in of outlines with red washes, and Hygiainon and his *confrères* had continued painting with a single colour,[3] a step further was made by Eumaros of Athens, who distinguished the sexes and "introduced all kinds of new subjects." Here we may clearly discern the introduction of white in the later Corinthian and early Attic wares for female figures, and the growth of mythological and genre subjects on the vases of the time.[4] His innovations of technique and subject may therefore be fairly regarded as coincident with the great advance in vase-painting made at Athens under Peisistratos and reacting upon Corinth. It is interesting to note that the name of Eumaros occurs on a marble base found on the Acropolis at Athens; and if this

[1] The earliest vase-painting with this subject is one from Athens (Ἐφ. Ἀρχ. 1886, pl. 8, fig. 1). See *Jahrbuch*, 1887, p. 153.

[2] See Jex-Blake and Sellers, *op. cit.* p. xxix.

[3] These artists represent the Dorian and Continental school, as opposed to the polychrome Ionian (see Pottier, *Louvre Cat.* ii. p. 584).

[4] It has, however, been suggested (Jex-Blake and Sellers, p. 101) that *figuras*, the word used by Pliny, denotes "positions" rather than "subjects." But this would seem more appropriate to Kimon (see below).

can be the painter, his date would be fixed about 590–570 B.C.[1]

In any case one thing is certain—that painting had not yet developed into anything like a high art. It was still purely decorative, and the few early paintings of which we hear, such as those of Bularchos (p. 361) and Kleanthes, were not beyond the level of the Clazomenae sarcophagi or the François vase in merit. We probably gain the best idea of painting which was not merely decorative from the Corinthian pinakes (p. 316) and the Acropolis warrior-tablet,[2] especially as they are painted on the white slip or λεύκωμα, which we know to have been favoured by early Greek painters.[3]

The relation of Pliny's next artist, Kimon of Kleonae, and of his improvements to the work of the vase-painters, has been much discussed by writers on the red-figured vases; and they have not been by any means unanimous in their conclusions, either as to the nature of his "inventions" or as to the time at which their influence made itself felt. They are described by Pliny in the following words: "Cimon of Cleonae improved upon the inventions of Eumarus. He invented *catagrapha*—that is, oblique images—and varied positions of the features, looking back or up or down. He distinguished limbs from joints, emphasised the veins, and further reproduced folds and hollows in the drapery."[4]

The *crux* of this passage is of course the word *catagrapha*, with Pliny's Latin equivalent, *obliquas imagines*. At first sight it would seem that the Latin rendering of the word connected it with the rendering of the face in a new way, *i.e.* in three-quarter aspect instead of the old profile of the silhouettes. But this was not introduced into vase-painting until quite a late period[5]; it is found, for instance, on the Meidias vase about 440 B.C., and is certainly not earlier than the time of Euphronios, whereas Kimon appears to have lived about 540—490 B.C.[6]

[1] As Studniczka maintains (*Jahrbuch*, 1887, p. 152): see also Hartwig, *Meistersch.* p. 154.

[2] Ἐφ. Ἀρχ. 1887, pl. 6.

[3] Athenag. *Leg. pro Christo*, 17, 293 (ed. Migne).

[4] *H.N.* xxxv. 56.

[5] Even full face is exceptional on the earlier R.F. vases. Cf. B.M. E 67, 74, and Hartwig, pl. 59, fig. 2.

[6] He is perhaps mentioned by Simonides of Keos (Overbeck, *Schriftquellen*, 379).

Moreover, there seems to be some antithesis between the *imagines* and *voltus*—i.e. *varios formare voltus* is not an explanation of the *imagines*—and, on the whole, it seems more natural to take the first word as a general term for figures. *Obliquas imagines*, then, would obviously imply some kind of perspective, which, when applied to the human figure, indicates foreshortening.

Now, this advance in drawing is first found in the earlier work of Euphronios, *i.e.* about 500—490 B.C., though traces of it are to be seen in the later work of the Epictetan cycle. It will be noted in the next chapter that Epiktetos and his contemporaries are still in the trammels of the old method. Many of these vases even exhibit traces of a *decadent* style, with rough and carelessly drawn figures. As Hartwig has well pointed out, the real division of *style* comes, not before Epiktetos, but between him and Euphronios. The Epictetan cycle is transitional, and a time of preparation, firstly in the change of technique, secondly in the evolution of cup-decoration, thirdly in the discovery of new motives and extending the scope of subjects. The new birth is seen in the form of increased naturalism, and is parallel to the development of sculpture under Pythagoras and Myron, who, like Kimon, "gave prominence to sinews and veins." We may therefore sum up with Studniczka and Hartwig by saying that the reforms of Kimon, which first manifest themselves in Euphronios and his contemporaries about 500 B.C., imply a new theoretical knowledge of linear perspective, which in practice displays itself in a correct rendering of foreshortening.[1] In minor details the same advance is at this time apparent, in the treatment of the eye, which now begins to be rendered with some approach to truth, and in the accurate and detailed rendering of muscles and anatomy, and of folds of drapery. These are precisely the points in which Pliny regards Kimon as having so greatly advanced his art, which, as Aelian tells us, he "helped out of leading-strings."[2]

[1] Studniczka says that *catagrapha* is a scientific term = "projection of a figure." Cf. Stephanus, *Thesaurus, s.v.*, and Jahn in *Ber. d. sächs. Gesellsch.* 1850, p. 138.

[2] *Lit.* "released from milk and swaddling-clothes" (*Var. Hist.* viii. 8).

The first painter in polychrome was Panaenos, who also introduced portraiture, but must still be regarded as a draughtsman only; and, finally, Polygnotos, by such innovations as giving expression to faces, and rendering transparent draperies, gave the first real advance to the art. So far Pliny on the beginnings of Greek painting; but its further developments, and more particularly the relation of Polygnotos to the fifth-century vase-paintings, must be more fully dealt with in a succeeding section.

CHAPTER X

RED-FIGURED VASES

Origin of red-figure style—Date of introduction—Καλός-names and historical personages—Technical characteristics—Draughtsmanship—Shapes—Ornamentation—Subjects and types—Subdivisions of style—Severe period and artists—Strong period—Euphronios—Duris, Hieron, and Brygos—Fine period—Influence of Polygnotos—Later fine period—Boeotian local fabric.

AT first sight the sudden reversal of technical method involved in the change from black figures on red ground to red figures on black ground is not easy to explain. That it was a new invention, not a development from the old style, is obvious, seeing that no intermediate stage is possible. The theory has been promulgated by a German writer[1] that the idea arose from the effect of the Gorgoneion painted on the inside of many late B.F. kylikes. Undoubtedly the effect is that of the R.F. style, the face itself being left red, surrounded by black hair, beyond which the black is continued over the whole surface of the interior.[2] But this theory has not really much to support it; the Gorgoneion *is in the R.F. technique,* and did not therefore suggest it; and the earliest R.F. kylikes usually have B.F. interiors, not R.F. It is exceedingly doubtful that the kylikes had anything to do with bringing about the change.

Much more probable is the suggestion that the class of vases with opaque figures on black ground (p. 393) represents the transition, if transition it can be called.[3] We have seen that some of these correspond more to the B.F. vases, others to the

[1] Klein, *Euphronios,*[2] p. 31 ff.
[2] See *Berl. Phil. Woch.* 1894, p. 112.
[3] See Norton in *Amer. Journ. of Arch.* 1896, p. 37.

R.F., and that in many cases their *appearance* is that of R.F. vases. It may easily be conceived that it occurred to the painter that it was more effective to let the red clay of the background appear through the black wherever he would place a figure than to paint the red on to the black. But these vases are few in number; and as the R.F. vases sprang at once into great popularity, the new invention must have become too general at the very first to have been adopted from such a comparatively rare method. There is also a greater tendency to naturalism in that class than in the earlier R.F. vases. The fact is that there had been going on throughout the course of early art a tendency (to which B.F. vase-painting forms an exception) in favour of drawing figures on a light ground against a dark background. And even in the B.F. vases this tendency is not altogether absent, as seen in the attempts at lightening the figures by making them polychrome, *i.e.* with purple and white, and also by the practice of covering the rest of the vase entirely with black.

Now, we have already seen that Andokides was a painter who liked to combine the two methods on one vase, and also that he was one who invariably adopted the completely black variety of amphora, for B.F. painting as well as R.F. His Louvre vase with the women swimming is clearly one of the earliest R.F. examples in existence. It is therefore much more likely that he represents for us the author of the new method than Epiktetos or the other artists who painted "mixed" kylikes or who used both styles. On the other hand, it must not be forgotten that it was really in the kylikes that the new style rose into popularity.[1]

Next to the question of how the new style was brought about comes that of when it arose, and the length of its duration at Athens. The chronology of R.F. vases rests on two considerations—the inscriptions on the vases themselves, and the evidence of history and excavations. Until within the last twenty years it had been customary to regard the year 480 B.C. as the line of

[1] Furtwaengler, in *Berl. Phil. Woch.* 1894, p. 112, in repudiating the idea that the new style was first introduced in the kylikes, seems to have misunderstood Hartwig's arguments.

demarcation between the two methods, and the earliest date for R.F. vases. Yet as long ago as 1834 Ludwig Ross, finding a fragment of R.F. pottery among the *debris* of the Persian sack of the Acropolis, acutely deduced therefrom that this style must necessarily have been in existence before the date of the sack, *i.e.* before 480 B.C. His views, however, fell on deaf ears, and it was not until the scientific exploration of the Acropolis in 1885—89 that his deduction was seen to be justified. The result of these excavations was to show that among the mass of pottery found in the pre-Persian stratum a considerable quantity belonged to a comparatively advanced stage of R.F. painting, including signatures of artists of the archaic and severe style down to Euphronios. Some writers have thought that these fragments may belong to the period between 480 and 460, when the rebuilding of the site was begun; but so many show traces of burning that it is far more probable that the earlier date is correct.[1] Allowing, then, for the necessary stages of development up to the time of Euphronios, the beginning of the style may be placed about 525—520 B.C., the date at which, as we have seen, Andokides may be placed. Besides his name (see above, p. 387) that of Euphronios "the potter" was also found on a base in the Acropolis excavations.[2] The other limit of date will be more conveniently discussed in a subsequent connection, and it may suffice to say here that the gradual pushing back of the *terminus post quem* points now to a much earlier *terminus ante quem* than was formerly supposed. Reasons will subsequently appear for placing the termination of the red-figure fabrics at Athens in the closing years of the Peloponnesian War (410—400 B.C.).

The evidence afforded by inscriptions is necessarily affected in some degree by that of excavations, and chiefly important for the *relative* dates of the vases. It is not palaeographical, but is afforded mainly by one class of inscriptions, that of the καλός-names, so far as they have an historical significance. These

[1] *Jahrbuch*, ii. (1887), p. 159 ff. The alternative view is upheld by Klein, *Lieblingsinschr.*[2] p. 26 ff., and he is followed by Murray, *Designs on Gk. Vases*, p. 6. Klein compares Epictetan vases with the work of Mikon, and also bases his argument on the story of Kimon and the bones of Theseus (see p. 418).

[2] *Inscr. Gr.* i. (*Atticae*), Suppl. pp. 79, 154; *Jahrbuch, loc. cit.* p. 144.

names will be the subject of discussion elsewhere,[1] and are only alluded to here for their connection with the question of chronology. It is a well-known feature of these καλός-names that many are those of famous historical personages, such as Alkibiades, Megakles, Miltiades, and Hipparchos.[2] But, on the other hand, any attempts to connect the vases with the historical bearers of the names have met with little success; there is also the danger of arguing in a circle—*e.g.* of saying that because Miltiades' name appears on a vase, it is therefore to be dated in his youth, and because the vase belongs to the date when Miltiades was young, therefore it bears the name of that individual.

Where the importance of these names really comes in is in their relation to particular artists or groups of artists. In this way, as Klein and Hartwig have shown, connecting-links between the artists can be traced and their chronological sequence assured. This, taken in conjunction with questions of style and our fixed dates obtained from other sources, enables us to extract a fair working chronology from all the data. The subject must, however, be dealt with in greater detail when considering the work of individual artists, and only a few general statements can be laid down here.

Many of the historical καλός-names, such as Hipparchos or Glaukon, were probably very common at Athens,[3] and we have therefore no grounds for attaching importance to their appearance. But in regard to the great painter Euphronios, whose date is fairly certain, it is important to note that two different names are connected with vases in his earlier and later manner respectively, viz. Leagros[4] and Glaukon. Euphronios began his career about 500—490 B.C., and it probably covered some forty years, from about 495 to 455. Hence we may place the time of

[1] Chapter XVII. See also especially Klein, *Lieblingsinschriften* (2nd edn. 1898); Hartwig, *Meisterschalen*; Wernicke, *Lieblingsnamen*; and *B.M. Cat. of Vases*, iii. p. 24.

[2] On the identity of these names in particular, see Klein, *Lieblingsinschr.*[2] p. 27 ff.; Murray, *Designs*, p. 6; *J.H.S.* xii. p. 380.

[3] Hartwig (p. 11) points out that vase-painters also bear well-known names, such as Hieron, Andokides, Aristophanes.

[4] The name of Leagros also occurs on late B.F. hydriae, *e.g.* B 325 in B.M. It is used by four R.F. painters in all.

Leagros' youth about 495—490, that of Glaukon about 465—460, and it is remarkable that the latter appears as "son of Leagros" in one or two cases.[1] Now, we know that there was an Athenian general Leagros who was στρατηγός in 467, and fell in battle against the Edones in that year. Also that he had a son, Glaukon, who commanded at Kerkyra in 433—432. In this case the historical data fit in so exactly with the evidence of the vases and of the Acropolis excavations[2] that we need hardly hesitate to accept the identity of these two names.

It has been assumed—and the assumption has hardly been questioned—that the καλός-names are necessarily always those of youths, *i.e.* of about seventeen to twenty years of age; this view is supported both by the general character of the subjects on the vases where they appear, and by the frequent use of the analogous formula ὁ παῖς καλός. Dr. Hartwig has laid down certain conclusions in regard to these names which have met with general acceptance, and may be briefly restated here by way of summarising the subject.

(1) All vases with the same καλός-name are limited to a period of ten years, and consequently all those which are by one artist belong to a definite circumscribed period of his life.

(2) All vases by different artists, but with the same καλός-name, are approximately contemporaneous, *i.e.* within ten years.

(3) The appearance of two or more καλός-names on the same vase indicates the approximate similarity of age of the persons named, the greatest possible difference being ten years.

(4) All vases with the same καλός-name, whether by one artist or more, can always be linked together by their style; the same name does not appear on a man's earliest and latest vases.

He further impresses the caution that the identity and position of the παῖδες καλοί (*i.e.* whether or no they belonged to the aristocratic class) is a secondary question compared with that of the development of painting which they help to elucidate.

The question of fabric is one that hardly needs discussion, the evidence pointing so unanimously to Athens in all cases.

[1] *E.g. Branteghem Cat.* 57.

[2] See Hartwig, *Meistersch.* p. 3, and *id.* in *Mélanges d'Arch.* 1894, p. 10. He also cites a vase in Berlin (1906) which bears the name Stesileos καλός. This may refer to the S. who fell at Marathon.

The apparent exceptions suggested by classes of vases found almost exclusively on one site, like the "Nolan" amphorae or the Gela lekythi, can easily be shown to be no real exceptions. We have already met more than once with instances of particular fabrics being favoured by particular places; and just as Ionian vases were imported to Caere or Vulci, and a special class of Attic B.F. vases made for Cyprus, so we may suppose that certain Athenian makers had a monopoly of export to Nola, to Gela, or elsewhere. Otherwise similarity of style, of technique, of subject, of the alphabet of inscriptions, and all other details point to a purely homogeneous fabric, and that this was located in Athens itself is not a matter to be seriously disputed. To this complete monopoly which Athens enjoyed in the fifth century only one exception can be traced, that of Boeotia, where local fabrics continued to be made at Thebes and Tanagra. Of these one class has already been discussed (p. 391); the other will be treated of subsequently (p. 451).

We must next consider briefly the technical characteristics and the forms of the Attic R.F. vases. As regards the former, the method pursued during the period under consideration may be summarised as follows. The artist sketches his design on the red clay with a fine-pointed tool; he then surrounds this outline with black varnish, laid on with a pen or brush,[1] to the extent of about an eighth of an inch all round, this being done to prevent the varnish, when laid on over the rest of the ground, from running over into any part of the design. Finally, details such as features or folds of drapery are added with a brush in black lines on the red, this process representing the incised lines of the old style; and further details are often expressed either in a thinned black pigment which becomes brown and is sometimes only perceptible in a strong light, or by application of white and purple as in the last period. In the severe style purple is generally used; but at a later stage this colour was dropped, and finally replaced by white. The accessory colours were chiefly used for fillets in the hair, liquids, flowers, and other small details, as well as for inscriptions.

[1] On the instrument employed, see above, p. 227.

Thus we see that the technical process of the preceding method is exactly reversed and that the figures now stand out in the natural colour of the clay against the black ground.

The advantages of the new method were obvious. As long as the vase-painters continued content with stiff and hieratic forms and mere silhouettes the black figures were sufficient. The careful mapping-out of the hair and muscles, the decorations, and all the details of shadow in painting and of unequal surface in sculpture could be easily expressed by the new method. But it is evident that these stiff lines were quite inadequate to express those softer contours, which melted, as it were, into one another, and marked the more refined grace and freedom of the rapidly advancing schools of sculpture and painting. By the change of colour of the figures to the lucid red or orange of the background, the artist was enabled to draw lines of a tone or tint scarcely darker than the clay itself, but still sufficient to express all the finer anatomical details; while the more important outlines still continued to be marked with fine black lines. At first the style is essentially the same, the forms precise, the eyes in profile, the attitudes rigid, and the draperies rectilinear. The backgrounds may have been painted in by an ordinary workman, and some specimens exist in which it has never been laid on (cf. p. 222). The artists seem to have worked from slight sketches, and according to their individual feelings and ideas, and as duplicate designs are quite unknown, there was clearly no system of copying.

The correspondence of *style* in the figures on the earlier R.F. vases to those of B.F. technique shows that the two methods must have coexisted for a time, and this is further borne out by the mixed vases of Andokides, Hischylos, and others, and by the work of artists who employed either style, like Pamphaios. The latter, for instance, seems to have adhered to the old style by preference for hydriae and large vases, but preferred to follow the new fashion in the kylix.

To quote a recent writer: "The new method opened up a path for the freer exercise of the imagination," and we can see in the red-figure vases a gradual development of artistic conception and power of expression, together with the shaking

off of all restrictions until the perfection of drawing is reached, and "the red figures stand out against the black, unencumbered with anything that might distract from harmony of colouring or purity of outline."[1] It is the essential characteristic of the new style that it is drawing rather than painting, and it stands out as the final attainment of what the vase-painters had really been striving after from the days of the Melian and early Ionic wares—namely, the perfection of linear design. The same principle is at work in the vases with white ground which passed through parallel phases of development.

Among minor details of drawing in which an advance is conspicuous is the treatment of hair, eyes, and drapery. In the B.F. style the hair was indicated as a black mass, standing out against the light background; but now that the background had become black, a separation was necessary. At first this was done by adhering to the old engraved line method, for which came to be substituted a narrow unpainted line. Next, an advance was made in the treatment of the hair itself, with a view to more accuracy in detail, and the contours are undulated or separate locks shown on the forehead. Sometimes a kind of stippling process is adopted, by means of which the hair is indicated by rows or clusters of raised dots, representing close curls, such as are seen in Attic sculpture of the late archaic period.

The general contours of the forms are slender; the foreheads are low, the noses prominent, the eyes long, the chins sharp, the legs short and thick, and the folds of the garments stiff and rectilinear. Women are not distinguished in this style either by their colour or by the shape of their eyes, in which respects they are drawn just like the men, but exclusively by their costume and form. The white hair of old men is indicated by white markings on the black ground, and curly hair, as noted, by little raised knobs of black paint (*βόστρυχοι*). The figures are generally small, but some of grandiose proportions occur even in the earlier stages, though more characteristic of the succeeding "strong" style. The principal outlines are usually finished with wonderful spirit and truth,

[1] C. Smith in *B.M. Cat. of Vases*, iii. p. 1.

but sometimes, as in the extremities, great carelessness is visible. The general effect is much enhanced by the fineness of the clay, which in the earlier R.F. vases is of a bright orange-red, as also by the brilliancy of the black varnish.

The development of the form of the eye is most important, as an aid to chronology (see Fig. 99). In the B.F. period it was invariably treated in two ways,—that of a man as a complete circle, in front view, between the lids, of which the upper is more arched than the lower; that of a woman is almond-shaped. In the R.F. vases the eye in front view is still maintained with figures in profile, but the sexes are not distinguished; the pupil is painted black, and the lids drawn at first like the B.F. male eye, then almond-shaped. The next stage is to shift the pupil (which now becomes a ring with

From *B.M. Cat.* iii.

FIG. 99. DIAGRAM SHOWING DEVELOPMENT IN RENDERING OF EYE.

central dot) into the inner corner. Lastly, this corner is opened out till it assumes the correct profile appearance, and then, about the middle of the fifth century, the pupil also attains the correct form. About midway in this development, as we have already seen, the power is acquired of moving the position of the pupil to express looking upwards, downwards, or sideways; the importance of this point as bearing on the new developments of Kimon of Kleonae we have already discussed. The eyelashes are not rendered until the correct profile is attained, except in a few instances, such as the Berlin cup of Euphronios (2282), where the lids are fringed with short, vertical strokes.[1]

In regard to the treatment of drapery, the earlier vases,

[1] See also B.M. E 15, E 458.

such as those of the Epiktetos cycle, retain the B.F. method of rendering folds only in the skirts of the chiton, these taking the form of parallel lines. Gradually the folds follow the motion of the body; and finally, under Euphronios, comes a marked advance, whereby contrasts of material are indicated.[1] He uses fine brown crinkly lines to represent the soft transparent Athenian fabric which we also see worn by the archaic female figures of the Acropolis.

Among the many improvements in drawing effected during the R.F. period, a notable one is that of the introduction of true perspective and more than conventional landscape. We know from the shield of the Athena Parthenos that this began to be understood at Athens by the middle of the fifth century, as also from the paintings of Polygnotos, and hence we are not surprised to find it appearing in the vases of the period when that artist's influence began to be felt. A fine example is the krater from Orvieto in the Louvre, with an Argonautic scene (see p. 442); and even more beautiful is the Blacas krater in the British Museum, which shows Selene disappearing over the top of a hill, and the stars setting in the sea (see Plate LIII.). These two vases also illustrate the introduction of the new principle of placing figures at different levels which was elaborated in the Meidias hydria, the vases of Kertch, and to a still greater degree in those of Southern Italy. All these details indicate the growing tendency towards a pictorial style, which in the first instance was due to Polygnotos.

The **shapes** of the R.F. period are to a great extent the same as in the last, but most of them are modified to some degree, and some new ones are introduced. Moreover, the relative popularity of certain shapes varies, the amphora and hydria of the B.F. period being now surpassed in favour by the kylix, the krater and lekythos receiving more attention, and certain new forms, such as the askos and stamnos, appearing at different stages.

For the first half of the period, from 520 to 460 B.C., the kylix is pre-eminent, not only in point of numbers, but for the attention devoted to its decoration. It is, as we have seen,

[1] Cf. Pliny's *In veste rugas et sinus invenit*, of Kimon,

doubtful whether it was actually in the kylikes that the new style came into being, but in any case they form the material for the study of its earlier phases. The form is that of the later B.F. varieties (see p. 191), as used by Exekias and the painters who used the large eyes in its decoration, tracing its origin probably to an Ionic source.[1] At first the decoration is often confined to the interior, or the exterior designs are little more than conventional, consisting of the eyes and a simple motive or figure between.[2] In the strong period there is usually a connection between the interior and exterior designs, the whole often forming successive episodes of a story[3]; but subsequently the old principle asserts itself, and the interior subject becomes the important one. Slight variations of form occur,[4] as in the cups of Brygos, with their off-set lip, or the delicate products of Sotades, the handles of which are shaped like a chicken's merrythought. In the latest specimens the stem is often replaced by a flat broad foot, or the bowl becomes flat and ugly, losing all the beauty of the earlier graceful curves.

Among other drinking-cups the kotyle, kantharos, and rhyton are most often found. The former was favoured by Epiktetos and Hieron, and a kantharos is signed by Epigenes, others by Nikosthenes and Duris. The kantharos, though a very beautiful form, is never common in the painted vases, being perhaps oftener made in metal. Among the kotylae we may mention here a series painted with an owl and olive-wreath,[5] which obviously have some reference to the cult of Athena. They have been identified, but on slight authority, with the *Παναθηναϊκά* mentioned by Athenaeus[6]; but their real meaning has not yet found a satisfactory explanation. The *rhyton* strictly belongs to the series of plastic vases (see pp. 201, 211), the lower portion being always modelled in the form of a head,

[1] See *Ath. Mitth.* 1900, p. 40 ff., and above, p. 357.

[2] See below, p. 427, for fuller details of the early development.

[3] Cf. the Troilos kylix of Euphronios (below, p. 433).

[4] See *B.M. Cat. of Vases*, iii. p. 11.

[5] See *B.M. Cat. of Vases*, iii. p. 14; Urlichs, *Beiträge*, p. 37; and cf. p. 135 for a mention of a vase stamped with an owl and olive-branch, and supposed to be an official choinix measure.

[6] xi. 495 B.

human or animal, or two conjoined. Some of these are signed by artists, such as Charinos and Kaliades.[1]

Of the amphora three main varieties are found. The earlier type, which reproduces the "black-bodied" or panel-amphora of the B.F. period, did not long remain in favour, and was mainly used by Andokides and Euthymides and their associates. The panel system of decoration is still retained, the framework being formed of ornamental patterns as in the old style. Secondly, there is the "Nolan" amphora, which came in about 500—480 B.C., and was obviously an improvement on the old "red-bodied" B.F. type. It is a very graceful, slender form, with long neck, distinguished by the surpassing excellence of its black varnish, and the impression of taste and restraint given by its simple decoration of one or two figures each side (see Plate XXXVI.). The third variety is the so-called *pelike* (see p. 163), a not very successful variation of the amphora, but for some reason very popular in the later stages. With its flat foot and bulbous body it stands in the same relation to the amphora as does the so-called aryballos (see below) to the lekythos.

Two forms that may be connected with the amphora are the stamnos and the psykter (see pp. 163, 172). The former is peculiar to the R.F. period in its earlier stages; the first known example is signed by Pamphaios, a "transitional" artist. Most of the known specimens attain a high average of excellence. The psykter or wine-cooler is very rare, but there are two fine examples signed by Euphronios and Duris.

The hydria in this period at first retains the B.F. form, as seen in an example of about 500 B.C. signed by Phintias (B.M. E 159), but the tendency to prefer a curvilinear outline is soon manifested. The new development is conventionally known as a *kalpis*. The shoulder having ceased to be distinct from the body, the design becomes single, or else is confined to the upper part of the field.

Of the krater we have at least four varieties, all belonging to the more developed stages of the period. The earliest example is the Antaios-krater of Euphronios in the Louvre, about

[1] See Reisch in *Röm. Mitth.* v. (1890), p. 313 ff., and below, p. 493.

500 B.C., which is of the form known as *vaso a calice* (p. 170); but this and the other varieties never become really common till the final stages are reached. The bell-krater, or *vaso a campana*, is only found in the late fine period, and is then almost the only kind of large vase made; the volute-handled krater, which was developed from the old column-handled type, is seen in some fine specimens. At first the design (as in the B.F. example by Nikosthenes, B.M. B 364) is confined to the neck. The treatment of the column-handled type is interesting as a survival of archaism both in design and arrangement, with the bordered panels and occasional B.F. friezes of animals.[1]

Among the smaller vases, the oinochoë and lekythos with their varieties, the askos and the pyxis, are the most important. With the exception of the ordinary form of lekythos these belong chiefly to the later stages, when the preference was for a sort of miniature style. Very few of these bear artists' signatures. The oinochoë differs little from the B.F. examples; the pyxis is practically a revival of an old form favoured in the Corinthian and other early fabrics. The latter are usually decorated with domestic or marriage subjects, in reference to their use by women for toilet purposes (see Plates XLII., XLIII.).

The lekythos was, as we shall see, the form exclusively employed for the funeral vases, and largely also for others with polychrome decoration on white ground. Those painted with red figures belong mainly to the strong period (500—460), and have been mostly found in Sicily, whither they were imported by preference, like the amphorae made for Nola; a fine specimen is given on Plate XXXVI. When this form came to be adopted for the funeral vases, a new type arose with bulbous or spherical body, conventionally known as an *aryballos*. In the late fine style we have many examples of this form, with rich polychrome decoration and gilding (Plate XLII.).[2]

The **ornamental patterns** on R.F. vases do not, generally speaking, call for so much attention as those of earlier style; they are on the whole used with great restraint and little variety, and are more subordinate to the designs than at any other period of vase-painting. The principal motives are

[1] Cf. B.M. E 471 ff.

[2] See *Jahrbuch*, 1894, p. 69.

RED-FIGURED "NOLAN" AMPHORAE AND LEKYTHOS (BRITISH MUSEUM).

the palmette, maeander, and egg-pattern ; all others are comparatively rare. It is interesting to note, on the early amphorae and hydriae, and on the column-handled kraters down to quite a late date, the survival of the old panel system with its borders of ornament. Strictly speaking, now that the background was black throughout, there was no necessity for enclosing the space on which the figures were depicted; but the conservative instincts prevailed, especially while the old shapes were retained.[1] Gradually, however, as these vases assumed new forms, the borders were almost unconsciously dropped—first the sides, then the top, and lastly the lower border, which maintained its ground longer than the others. The same tendency, from a formal framework to absolute freedom, is in fact to be observed in all the vases; and in the later stages we note a new development, that of an elaborate pattern of palmettes under the handles, which assumes more and more prominence.

The evolution of the palmette on R.F. vases has been skilfully traced by Dr. Winter[2] in reference to the kylikes; but it is no less interesting in the amphorae and similar forms. In both cases it arose from the tendency to make the handles terminate in stylised palmettes, which on the B.F. kylikes of the minor artists are often a prominent element in the decoration. Similarly, on the B.F. red-bodied amphorae we have the symmetrical compositions of palmettes under the handles radiating from a common centre. These were at first reduced to a modest single palmette or a pair, but soon spread out again, preserving at first the symmetrical grouping; subsequently, with an increasing tendency to naturalism, the palmettes, enclosed within graceful tendrils, form *unsymmetrical* but highly pleasing compositions without any definite centre.[3] This development of ornament under the handles—to which part of the vase it was almost restricted—can be traced during the first half of the fifth century, till it reaches its height about the middle. Where a band of ornament was required round the base of the design, as on the large calyx-kraters, it takes the

[1] See what has been said above on the changes in the form of the amphora, hydria, and krater.

[2] *Jahrbuch*, 1892, p. 105 ff.

[3] *E.g.* Vienna 234, 339 (the latter given in Fig. 101).

form of a row of palmettes enclosed in tendrils, in the style of modern arabesques; or the palmettes are arranged in pairs, set obliquely, and each pair divided by a scroll ending in volutes. Or, again, a row of somewhat squat palmettes, similarly enclosed, alternates with lotos-flowers in the old style, as on B.M. E 169.[1]

In the kylikes the development of the handle-ornament first begins with Epiktetos, who (as on E 3 in B.M.) first draws a free palmette with separated leaves on either side.[2] As the tendency to cover the whole of the exterior space with the design increased, the intervening space under the handle came to be filled in also, by extending the tendrils of the palmettes and terminating them with buds (Fig. 100).[3] Next,

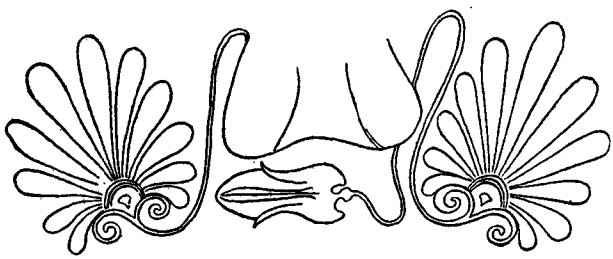


FIG. 100. PALMETTES UNDER HANDLES (EARLY R.F. PERIOD).

a tendency to symmetrical composition each side is seen, the palmettes being doubled in number[4]; or, again, an attempt is made at uniting the two isolated palmette-systems in one harmonious whole, and at the same time to fill the intervening space, by means of interlacing tendrils.[5] The palmettes are further increased to three or four each side, and in the arrangement is seen the tendency to freedom even at the cost of symmetry already noted, as in Fig. 101.[6] Thus is reached the point at which the severe passes into the strong style. In

[1] See also some valuable notes on the subject in Riegl's *Stilfragen*, p. 191 ff.

[2] B.M. E 4-5; *Arch. Zeit.* 1885, pl. 16, fig. 3.

[3] B.M. E 17-19; Berlin 2263, 4220; Louvre G 18; Helbig 246 = *Mus. Greg.* ii. 70, 2. All these are cups with the name of Memnon καλός.

[4] Berlin 2262.

[5] B.M. E 22, 41; Berlin 2264-65; Louvre G 17.

[6] *E.g.* Munich 1160 (by Hischylos) B.M. E 37-8, 40.

the latter the palmettes are often omitted altogether,[1] especially where the two exterior scenes are connected; or their place is taken by some figure under the handle, as on vases by Hieron or Brygos. Where the patterns do occur, they are often stereotyped, as in the vases of Duris, who on nine examples with handle-patterns repeats the same device in each case. In the fine style, after 460 B.C., the symmetrical arrangement recurs, the usual type consisting of a double palmette between two large ones, with connecting and enclosing tendrils.

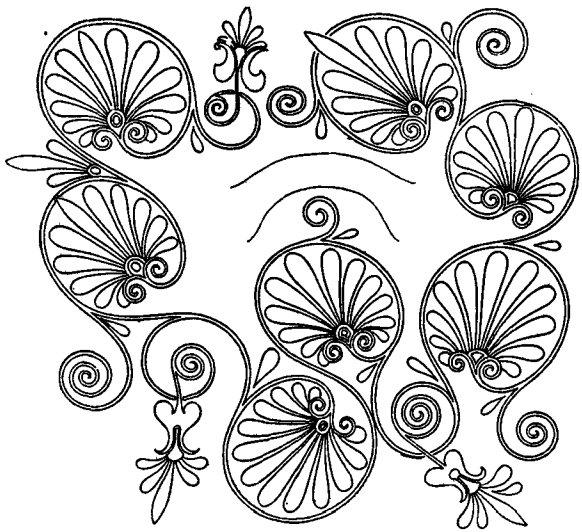


FIG. 101. PALMETTES UNDER HANDLES (LATER STAGE).

Another method of tracing the chronological sequence of the R.F. cups is by means of the maeander patterns which surround the interior design and extend below the outside scenes (Fig. 102).[2] A parallel development of this pattern may also be traced on the amphorae and other vases, where it is used as a border below the figures. In the severe style, as in the cups of Epiktetos, this pattern has not yet made its appearance, and its place is taken by a simple line of red; and in the vases of Euphronios,

[1] As on E 69, 78.

[2] See also Chapter XVI. § 3.

on which it is first found, a simple maeander is employed. The first to vary this was Duris, who alternates it with squares, the centre of which is "voided" in the form of a red cross, and this practice subsequently became invariable. The square itself shows a development of form, the cross being first filled in with a black centre, then made diagonal; next, the black background is largely diminished, until it disappears, except for dots between the arms of the black cross; finally, it changes into the form of a chequered square, black and red, of which the red squares are sometimes dotted.

The **subjects** on red-figured vases may not perhaps be so varied or so full of mythological interest as those on the black-figured, but yet present many features worthy of attention. At the very outset we see the tendency towards scenes from real life in preference to those from mythology; and on the whole throughout the period the ratio of one class to the other is

From *B.M. Cat.* iii.

FIG. 102. DEVELOPMENT OF MAEANDER-AND-CROSS PATTERN.

exactly the reverse of the preceding period. Nor are the stock subjects in either class the same. In regard to mythology the cosmogonic themes of B.F. vases, such as the Gigantomachia and the Birth of Athena, are replaced by such subjects as Eleusinian and Attic local cults, the sending forth of Triptolemos or the birth of Erichthonios. In the heroic cycles Herakles is no longer the popular favourite, but is supplanted, for reasons presently to be detailed, by Theseus. The Argonautika frequently provides subjects for vases of the more developed style, in which the influence of Polygnotos is felt; and the *Odyssey* begins to rival the *Iliad* as a source of epic themes. The influence of the stage is as yet hardly felt, though here and there scenes may be traced to the influence of some Satyric drama.

In subjects relating to Dionysos and his attendant Satyrs and Maenads a considerable change is to be noted, in the direction of a preference for violent action. The Bacchic

revellers of the B.F. vases, even at their highest pitch of excitement, are generally stiff wooden figures, with mechanical and restrained pose or action. But the exteriors of many cups of the best R.F. period, such as those of Hieron or Brygos, are enlivened by throngs of frenzied Maenads and wild drunken Satyrs, given up to the most unrestrained and licentious merriment (see Chapter XIII.).

Turning to the subjects of daily life again, it may be observed that on the B.F. vases the preference is for battle-scenes, warriors setting out for battle, or scenes of the chase; even athletic subjects are in a great minority, except on the Panathenaic amphorae. In the R.F. period the preference is for athletic scenes, banquets, and the life of women and children; we also find frequent illustrations of religious cults, and scenes of sacrifice and libations. The R.F. vases of the severe stage in the main follow on the lines of the later B.F. period, except in the interiors of the kylikes of the Epictetan cycle. In these we find very few instances of mythological subjects, unless it be single figures of Satyrs. The main object of the painter was to fill in the circular space as best he might, and this space only admitted of a single figure, the rule being observed that exterior and interior figures should be of similar proportions. Hence the easiest solution was obviously to choose a simple figure, such as that of a nude young man, and depict him in various simple attitudes, running, leaping, carrying a vase or musical instrument, or otherwise engaged in such a way as to fill the space with his limbs or the objects he carried (see p. 426).

In the "strong" style we observe a new principle at work, which may be described in a single phrase as "the glorification of the Attic ephebos or young athlete." A new impetus had been given to athletics at Athens by the Peisistratidae, who encouraged a more extensive celebration of festivals, and thus we find a growing fondness for the introduction of scenes from the palaestra and stadium, often rendered with considerable spirit and unconventionality, as in a group of boxers quarrelling,[1] or on another vase depicting the humorous side of the armed foot-race.[2]

The introduction of scenes from the story of Theseus, which

[1] B.M. E 6, 78.

[2] B.M. E 818.

now begin to be frequent, especially on the kylikes, is no doubt due partly to this cause, though partly also to religious and patriotic reasons. Theseus seems to have been regarded as the typical Attic ephebos and athlete, and his contests as analogous to success in the palaestra. Hence the grouping of scenes from his labours after the manner of groups of athletes variously engaged. It was formerly thought that the popularity of the Theseus legends was due to the bringing back of his bones from Skyros by Kimon, and their solemn burial in the Theseion, which gave rise to a regular cult of the national hero. But this took place in 469 B.C., and recent investigations have shown that many of the Theseus vases must be placed at an earlier date. He was, however, supposed to have appeared at the battle of Marathon in aid of the Athenians, and this event may have been quite sufficient to bring his cult into prominence.

Towards the middle of the fifth century several new types are introduced—such as the youth as distinguished from the ephebos, the girl as distinguished from the matured woman,[1] and the infant playing with toys. Juvenile games, such as the top, hoop, and knucklebones, now become generally popular. The evolution of the types of Eros and Nike virtually dates from this time[2]; hitherto Eros (as, for instance, on the kylikes) has seldom appeared, and Nike is also hardly found before the "strong" style. Meaningless groups of figures, conversing or without particular action, are common on the exterior of cups by Hieron and his contemporaries; and similar groups, though, in accordance with the spirit of the times, more freely and pictorially composed, become the recognised method of decorating the small elegant vases of the late fine style. In some of these an ancient practice is revived of attempting to give interest to the scenes by adding mythological names to the figures. But these are chosen quite at haphazard, sometimes as vague personifications (see Chapter XII., under Aphrodite), sometimes in such anomalous collocations as Thetis and Hippolyte, or Danae, Helen, and Iphigeneia.[3]

[1] See Hartwig, *Meistersch.* p. 321; and cf. B.M. E 68, 718.

[2] See Furtwaengler, *Eros in d. Vasenm.*; Knapp, *Nike in d. Vasenm.*

[3] B.M. E 772-73.

In the treatment of mythological scenes it is curious to note how, almost from the first, the well-worn conventional types of the B.F. style are discarded, the painter, with his new-born capacities for drawing and free composition, instinctively forming his own idea of his subject, and departing from the lines on which his predecessors had worked. Some subjects are almost entirely ignored, such as the chariot procession (of Herakles or deities), the contests of Herakles with Triton and the Cretan bull, warriors playing draughts, and Odysseus and Polyphemos. The labours of Herakles are largely replaced by those of Theseus. In other cases the subjects are still popular, but the "type" is no longer preserved, as in the case of the Judgment of Paris or some of the labours of Herakles.

But it must not be supposed that the principle of recognised "types" is altogether absent from the R.F. vases. There are, in fact, certain motives which occur over and over again, only with this difference—that they are not always employed with the same signification. Thus the "pursuing" type, which is as common as any on R.F. vases, may be either mythological or ordinary. In the former case Eos pursues Kephalos, or Menelaos Helen; in the latter a Seilenos pursues a Maenad, or a warrior or hunter a woman. This type becomes almost conventional, and the figures can only be identified when inscribed. Theseus, Ajax, Orestes, Ion, Alkmaion, and Neoptolemos all pursue women in the same manner. Again, the B.F. type of Peleus seizing Thetis, sometimes found on R.F. vases,[1] is used for that of a Seilenos seizing a Maenad, even the snakes into which Thetis transforms herself becoming the ordinary attribute of the Bacchanal.

A different class of subjects, in which the subject remains the same but the type varies, is also found on R.F. vases. In such cases the various artists seem to have drawn their inspiration from the same model; it might be a famous sixth-century painting or sculptured group, but each has treated it

[1] Notably on the fine kylix by Peithinos in Berlin (Hartwig, *Meistersch.* pl. 24). Cf. B.M. E462, 510, and Furtwaengler and Reichhold, *Gr. Vasenm.* pls. 44-5 = Munich 408.

according to his own individuality. A good instance is the subject of the sack of Troy, the principal episodes of which we find depicted by the masters Euphronios and Brygos (Plate LIV.), and on a hydria of somewhat later date.[1]

Another characteristic of R.F. vases is the individualising of barbarian types, a new feature in Greek art. It is possible that this is largely the effect of the Persian wars, which rendered the Greeks familiar with barbarian costumes.[2] In any case the fashion of wearing Thracian cloaks and other outlandish garments seems to have been adopted by the young men of Athens at the beginning of the fifth century, and many of the cups of that period represent young horsemen apparelled in this fashion (see Chapter XV.). There was also in the fifth century a fondness for vases modelled in the form of heads of negroes or Persians. Such subjects as those relating to Orpheus, the rape of Oreithyia, Herakles and Busiris, or combats of Greeks with Amazons or Persians, also illustrate the popularity of these new ideas.

The only other class of subjects to which reference need be made is that dealing with religious cults,[3] such as libations or sacrifices to deities or terminal figures, particular ceremonies and festivals, or quasi-religious competitions of an athletic or musical kind.[4]

In regard to style, the Attic red-figured vases fall into four principal groups, which are usually classified as follows (though each group is sometimes subdivided):—

(1) **The archaic or severe period** (about 520—500 B.C.), in which there is little advance in the drawing, which is stiff and lacks technical freedom. Apart from the new experiments in technique, it is marked by its wide and novel choice of subjects, with great attention paid to details. The principal artists whose signatures are found in this group are: (*a*) cup-painters—Epiktetos, Hischylos, Pheidippos, Pamphaios, Chelis, Chachrylion, Euergides, Epilykos, Hermaios, Sikanos; (*b*) other

[1] Cf. also, for varied treatment of the same subject by two artists, B.M. E 44 (ext.) with Louvre G 17.

[2] See Hartwig, *Meistersch.* p. 515 ff.; and for further details, Chapter XV.

[3] See Chapter XV. § 1.

[4] *E.g.* B.M. E 406 (Lampadedromia); E 298, 460, 469, 270 (musical contests).

painters—Andokides, Euthymides, Phintias (amphora and hydria), Hypsis (hydria), Psiax and Hilinos.

(2) **The strong style** (about 500—460 B.C.), characterised by a great and sudden advance in drawing and power of expression, which leads the painter to attempt difficult subjects with success. The difficulties of front-view or three-quarter drawing, as opposed to the old profile-figures, are also largely overcome. In the amphorae and other forms the compositions are restrained and dignified, being often limited to one or two figures in large style. The principal artists are: (*a*) cup-painters—Euphronios, Oltos, Sosias, Phintias, Peithinos, Duris, Hieron, Brygos, Amasis, Onesimos; (*b*) other artists—Euxitheos, Smikros.

(3) **The fine style** (about 460—440 B.C.) exhibits the culmination of technique and composition, with great breadth and largeness of conception in the larger vases, delicacy and refinement in the smaller. Cup-painting has passed its zenith, and yields comparatively few artists' names. In this period the influence of Polygnotos and the great painters begins to make itself felt, in a tendency to more pictorial composition; landscape is indicated, and figures are placed at different levels. The influence of sculpture may also be traced. The chief artists' names are: Aeson, Aristophanes and Erginos, Epigenes, Hegias, Hermonax, Megakles, Polygnotos, Sotades, and Xenotimos; Meidias and Nikias; Xenophantos.

(4) **The late fine style** (about 440—400 B.C.) is marked by a great falling-off in every respect. The extraordinarily rapid advance, both in artistic conception and in power of execution, during the preceding fifty years, fostered by the concurrent advance in sculpture and painting, hastened the vase-painter to his ruin. With the attainment of perfection in drawing, dexterity and grace are his sole aim, and in place of vigour and originality we meet with over-refinement and mannerisms, and florid pictorial compositions executed in a careless manner.

We now propose to speak in detail of the principal artists of this period, a study of whose works will be sufficient to give a clear idea of the achievements of the new style, at all events down to the middle of the century.[1] After that time

[1] General reference may be made to Klein's *Meistersig.*, 2nd edn., supplemented by Hartwig.

the signatures become so rare that the later vases are best treated as a whole.

It is important to note, by way of preliminary, the various methods of signature which the artists adopt (see also Chapter XVII.).[1] The ordinary signatures fall under four headings: (1) *ἐποίησεν*; (2) *ἔγραψεν*; (3) *A. ἐποίησεν, B. ἔγραψεν*; (4) *A. ἐποίησε καὶ ἔγραψεν.* In the archaic period *ἐποίησεν* covers the work of the potter and painter, except in the case where the latter is specially mentioned. In the best period we usually find *ἐποίησεν* on the kylikes, *ἔγραψεν* on the amphorae. Euphronios and Phintias use either (1) or (2). The vase E12 in the British Museum has only the inscription, *Πάμφαιος ἐποίησεν*; but, as will be seen later, there is good reason for supposing that the exterior was not painted by him. Different formulae, it has been suggested, may represent different periods in a man's career, as in the case of Euphronios, who was at first a painter in Chachrylion's workshop, then worked independently, and finally adopted Onesimos as a partner (see p. 434). The use of the imperfect *ἐποίει* in some cases is characteristic of the transitional period (see below, p. 430).

In the archaic or severe period the typical name is that of **Epiktetos,** who, as we have seen, is thought by some authorities to have been actually the inventor of the red-figure style. However this may be, he is the principal representative of the development of cup-painting during this period—a development which has been carefully traced by Klein.[2] We have no B.F. kylikes signed by him, although there are four examples of "mixed" cups with B.F. interiors, three of which were made by Hischylos, the fourth by Nikosthenes, while Epiktetos was presumably responsible for the whole of the decoration. He invariably signs with the formula *ἔγραψεν*, from which we know that all his signed vases are actually the work of his brush. Besides those already mentioned, he painted two cups which bear Pamphaios' name as potter, and two more with those of Hischylos and Python as potters—all R.F. throughout, one of the Pamphaios cups

[1] Cf. also C. Smith in *B.M. Cat. of Vases*, iii. p. 21.

[2] *Euphronios*,[2] p. 14 ff., with list of cups in Appendix.

1 2

1, Interior of Kylix of Transitional Style; 2, Plate by Epiktetos (British Museum).

retaining the old fashion of decoration with eyes on the exterior. The vase made by Python[1] is interesting from its subject—the slaying of Busiris by Herakles.[2] It belongs to an advanced stage of his career, when the exterior designs were assuming more importance and developing from decorative compositions to regular friezes. Thirteen kylikes and ten plates with designs like those on the interiors of the cups (Plate XXXVII.), a kotyle with Pistoxenos' name as potter, and two amphorae, make up the total of Epiktetos' performances.

Murray thus describes the chief characteristics of Epiktetos' work[3]: "No painter is so uniform and at the same time so peculiar in his manner as Epiktetos. His drawing is always characterised by precision and fastidiousness. He loves slim, youthful forms. . . . He prefers to draw his figures on a small scale, where his minute touches produce at times a startling vividness. He appears to have been influenced in a measure by the older miniature vase-painters [the 'minor artists'] . . . his manner is singularly precise and fastidious . . . but his precision never fails him. . . . He uses skilfully faint yellow lines for the inner markings of muscle and bone." Hartwig points out that he continues the development of a refined archaism from Amasis (p. 382). The period of his activity may be placed between 530 and 500 B.C.

Pamphaios, although the majority of his vases are in the R.F. technique, really excelled in the old method. We have from his hand two B.F. hydriae, four B.F. kylikes, two mixed kylikes, fifteen R.F. kylikes (five with interior designs only), two amphorae and a stamnos, and he also made two cups for Epiktetos. He signs consistently *ἐποίησεν*. In the B.F. hydria in the British Museum (B 300 = Fig. 120), he, as Murray says, has indulged to excess his sense of refinement and grace, in which he was unsurpassed. When he turned to red figures, the new technique seems to have perplexed him, and he found himself unable to use his faculty for minute detail. But though comparatively coarse and decadent, there is a freshness and vigour in his new conceptions, especially in the Museum

[1] B.M. E 18.

[2] The *type*, it should be noted, is purely B.F. in character.

[3] *Designs on Gk. Vases*, p. 8.

stamnos (E 437) with Herakles and Acheloos, which atones for other deficiencies.

Most remarkable of all his signed works is the British Museum kylix (E 12), with its exquisite exterior designs, of which Murray says, "Surely in the whole realm of Greek vase-painting there is hardly to be met with a finer conception" than the figures of the two wind-gods or death-deities carrying off the body of the dead warrior. Nor are the figures of Amazons arming on the other side of inferior merit. So marked, indeed, is the superiority of these designs to Pamphaios' ordinary work, that most authorities are agreed in attributing them to another artist belonging to a more advanced school—namely, Euphronios. We have after all no certain proof that the *painting* of the cup is Pamphaios' handiwork, and we can only say that, if it is, it betokens a most surprising outbreak of artistic power.

Of the other artists in this cycle *Hischylos* appears chiefly as a potter for other artists; for Sakonides he made a (B.F.) kylix, for Epiktetos four, and for Pheidippos one. A B.F. plate, two "mixed" cups, and one R.F. cup bear his name alone. He always signs with *ἐποίησεν*, but it is not improbable that he was responsible for the interior B.F. designs on three of the cups made for Epiktetos. *Pheidippos* is only known from the one cup already mentioned. *Euergides* made three cups, *Epilykos* three,[1] *Hermaios* five[2] (one of which bears a figure of Hermes, perhaps by way of a sort of canting heraldry), and *Sikanos* one plate. The cups by *Chelis* number five, of which one has a B.F. interior.

Chachrylion, who stands on the verge of the next period, calls for more detailed treatment, especially since the exhaustive discussion of his work by Hartwig.[3] Sixteen cups signed by him are known, two having been discovered since Klein made his list; he also acted as potter for Euphronios on one occasion. He always signs *ἐποίησεν*, but we may assume that

[1] The Louvre cup F 129, inscribed Ἐπίλυκος καλός, cannot be assigned to him, although Klein did so. See *Monuments Piot*, ix. pp. 157, 168 ff.

[2] *Él. Cér.* iii. 73; B.M. E 34; *Brantegheim Cat.* 28; fragment acquired by B.M., 1896; *Boston Mus. Report*, 1903, No. 52.

[3] *Meisterschalen*, chap. iv.

this includes the decoration of the vases. With him we enter upon the period in which the use of "favourite names" by vase-painters becomes regular, those employed by Chachrylion being Leagros and Memnon. The former name is also used by Oltos, Euthymides, and Euphronios, and the names of Epidromos and Athenodotos belong to this period, if not to this cycle. A number of vases with the name Memnon have no signature, and these have usually been attributed *en bloc* to Chachrylion. But it has been pointed out by Hartwig that some of them must belong to an earlier stage, standing in much closer relation to the B.F. vases. Besides the sixteen signed vases, Hartwig assigns to him seven with the name of Epidromos, and two others with that of Leagros in addition, and another without name. A remarkable number of these cups have no exterior decoration.

Chachrylion's work is in character essentially transitional. Some of his cups[1] are in the style of the archaic decadence, before the new influence of Euphronios, but he never freed himself from the trammels of the severe style. He drops the Epictetan method of decorating the exterior with large eyes and animals bounding the scene, and uses large palmettes under the handles; but his interior scenes are still bordered with a plain ring, instead of the later maeander. He is never altogether happy in his exterior designs; hence his preference for interiors, in which, it may be noted, he is almost the first to introduce more than one figure.[2] His figures, like those of Epiktetos, have slim proportions and small heads, the bodily forms better rendered than the limbs. He seems to strike a medium between the vigour of Pamphaios and the refinement of Epiktetos, combining robustness and grace with a tendency to largeness of style,[3] which shows that he is preparing the way for Euphronios.

In summing up the characteristics of the cups of severe style, we note that they exhibit throughout a development in technique and decoration rather than in style and drawing.

[1] Nos. 8-11 in Klein's list, according to Hartwig, p. 63.

[2] The earliest example seems to be Reinach, i. 223 = *Wiener Vorl.* D. 5 (a cup by Pamphaios).

[3] As in the Epidromos cup (B.M. E25).

The earliest are little removed from the later B.F. kylikes with interior designs and large eyes on the exterior, many having in fact B.F. interiors. With the eyes occupying so much space, it is rare at first to find anything like a composition on the exterior; but gradually the eyes disappear, the palmette ornaments (see p. 414) decrease in size, and the figures extend themselves into friezes, with definite action. We have scenes of combat with a marked centre, like a sculptured pediment, group of athletes or revellers, and mythological or heroic subjects from the stories of Herakles, Theseus, and Troy.

In the interiors the development is somewhat different. Beginning with a simple design of a simple figure within a plain circle—at first an enforced necessity, but subsequently due to choice—the tendency is to fill in the space more and more as the power of drawing develops, and the painter casts about for new ideas. Hence, as Klein[1] says, "Here we have carrying, lifting, hurrying, running, stooping, dancing, springing . . . and all for the sole purpose of obtaining those movements of the human body which the space of the vase demanded." We also note the almost entire absence of mythological scenes in the interiors; repose or simple action is all that is aimed at, whereas on the exteriors scenes of activity or even violence are admitted.

Murray[2] has pointed out some interesting parallels between the kylix-interiors and contemporary coins and gems, which show the vase-painter to have been in full accord with the spirit of the times. Thus, to take the coins first, the Sphinx of Chios is repeated on the B.M. vase E 10, the armed warrior of Aspendos on E 11, the Diskobolos of Kos on E 78, and the squatting Satyr of Naxos on a vase formerly in the Bourguignon collection.[3] Among fifth-century gems we find such subjects as a youth kneeling and holding a jug, a woman at a washing-basin, a Satyr with wine-skin, a youth fastening his sandal, and an archer[4]—all of which occur on the interior

[1] *Euphronios*,[2] p. 26: cf. Plate XXXVII.

[2] *Designs on Gk. Vases*, p. 4.

[3] Reinach, i. 460, 1.

[4] See Cesnola, *Cyprus*, pl. 39, fig. 8, pl. 40, figs. 11-12; the Satyr and archer are among recent acquisitions of the British Museum.

of R.F. kylikes. The beautiful subject of the body of Memnon borne by two genii (see above), although an exterior subject, may also be mentioned here as paralleled in a fine gem.[1]

In Klein's valuable monograph on early R.F. cup-painting there is a useful table[2] setting forth the development of the Epictetan cycle of cups, both in subject and arrangement. His first class includes the purely B.F. cups of Nikosthenes and Pamphaios, with the Gorgoneion in the interior and large eyes on the exterior, which form the prelude to the R.F. series. In the next stage a B.F. subject, such as a warrior, horseman, or deer, takes the place of the Gorgoneion; the exteriors are R.F., but the eyes are retained, allowing only of a single figure each side. Three of these are painted by Epiktetos, others by Pamphaios and Chelis. The third stage has only R.F. interiors, the exterior preserving the same character; instances may be found among the works of Chelis and Pheidippos. Finally, there is a long series of nearly eighty cups and plates, many of the former with interior designs only, in which the eyes are finally dropped, and the exterior subjects are developed into regular friezes, being often mythological. These include the majority of the works of Epiktetos, Pamphaios, and Chachrylion, the latter of whom marks the transition to the next stage.

Turning now to the works of other artists in this period, and passing over Andokides, whom we have already discussed (p. 386), we find that **Euthymides** is the most conspicuous name after those of the cup-painters.[3] Strictly speaking, he does not belong exclusively to the severe period, at least in point of date, though his style is comparatively behindhand; as we shall see, he was partly contemporary with Euphronios. His style is curiously similar to that of Phintias, as is shown by the fact that the same unsigned vases have been attributed to both by different authorities. Five vases bear his signature (in two cases ἔγραφε, in the others ἔγραφεν), and he gives the additional information that he was the son of Polios. He uses three καλός-names—

[1] *Ann. dell' Inst.* 1883, p. 213.

[2] *Euphronios*, p. 289 ff.

[3] See Hoppin's monograph on this painter, *passim*. In addition to the five signed vases (for which see Klein, *Meistersig.* p. 194) he gives the following as probably Euthymides' work: B.M. B 254-56, 767; Munich 410 = Furtwaengler and Reichhold, pl. 33; Berlin 2180; Reinach, ii. 133.

Megakles, Smikythos, and Phayllos, the first-named being also employed by Phintias. Two of his vases (in Munich; see Fig. 137) are amphorae, one a hydria, one a *psykter*, and one a circular dish or plate like those of Epiktetos.

The similarity of his work to that of Phintias suggests that they were partners. A vase with the inscription τοὶ τήνδε, *Εὐθυμίδες*, "This [vase I dedicate] to thee, Euthymides," has been attributed by Hartwig to Phintias, and may be an interesting instance of the friendship existing between the two artists. On the other hand, Euthymides seems to have viewed with apprehension and jealousy the growing success of his junior, Euphronios. On one of the Munich amphorae he places the boast—by no means with justification—"Euphronios never made the like" (ὡς *οὐδέποτε Εὐφρόνιος*).

The height of his activity may be placed about 500—490 B.C., a date which suits the use of the name Megakles. This probably denotes the grandfather of Alkibiades and uncle of Perikles, who was ostracised in 487 B.C. The same name, as is well known, occurs on the warrior-tablet found on the Acropolis,[1] and on the strength of this Hoppin attributes the tablet to Euthymides.[2] There is, however, no proof that such tablets, which belong rather to the higher branch of painting at that time, were made by vase-painters.

The style of Euthymides and his preference for the amphora seem to indicate that he was much under the influence of Andokides. He still clings to the old style in his methods of decoration, as in the borders of the designs. His individuality, says Hoppin, is best shown in his draperies, the details of which are faintly indicated in red, and he shows some skill in foreshortening, but his heads are too large. He also exhibits a strong preference for mythological subjects, such as the arming of Hector, but usually balances these subjects with a genre-scene from the gymnasium or symposium.

His partner **Phintias**[3] is distinguished from him in one respect—namely, that he painted cups as well as other shapes. But his cups have nothing in common with his Epictetan cycle,

[1] Ἐφ. Ἀρχ. 1887, pl. 6.
[2] See also *J.H.S.* xii. p. 380.
[3] See Hartwig, chap. ix. throughout; also Jones in *J.H.S.* xii. p. 366 ff

and seem rather to have been under the influence of Euphronios. We may therefore regard him as another connecting-link between the severe and strong periods. Eight vases are actually signed by him,[1] though one of these has no subject, being merely modelled in the form of a head (see below, p. 493); but from his use of Megakles and Chairias as καλός-names, and other indications, Hartwig has been enabled to add to the number no less than twelve cups and eleven other vases.[2]

The cups are mostly small, with interior designs only, and those single figures; his composition is not a strong point, but the single figures are good, especially the nude forms; his draperies are stiff, but effective, and his heads are influenced by Euphronios, as Hartwig notes.

A pair of painters that may be linked together are **Oltos** and **Euxitheos,** the former the painter, the latter the potter, of a kylix in Berlin (2264). We also have a magnificent kylix at Corneto, with the name of Euxitheos as potter, probably painted by Oltos; on one side of the exterior is an assemblage of the gods, on the other a Dionysiac scene.[3] In the British Museum is an amphora, also made by Euxitheos (E 258; signed on handles), with a single figure each side (Achilles and Briseis), and a krater in the Louvre with the καλός-name Leagros seems to be by the same hand.[4] Hartwig, who regards Oltos as the painter in each case, shows his connection on the one side with Andokides and Euthymides, on the other with Hieron. He displays a preference for large figures and for Dionysiac subjects.

The one vase of *Hypsis*, a hydria,[5] must be of early date; the shape, ornamentation, and arrangement of the designs are purely B.F. in character. We have two vases of the *alabastron* form[6]—an unusual one for signatures—made by *Hilinos* and painted by *Psiax*, and a kylix of Epictetan style in Munich signed by the

[1] Klein only knew of four, but Hartwig (p. 168) has added to his list.

[2] A hydria in Munich (No. 6) is also probably his work. It represents his colleague Euthymides and another potter, Tlenpolemos (see p. 440). Cf. the vase mentioned above, dedicated by Phintias to Euthymides.

[3] Reinach, i. 203.

[4] See also Hartwig, pl. 6.

[5] Gerhard, *A.V.* 103 = Reinach, ii. 57. The vase in *Ant. Denkm.* ii. pl. 8, is probably not his work, as has been suggested. The ornamentation of the hydria is not given accurately by Gerhard. (see Klein, *Meistersig.* p. 198).

[6] Karlsruhe 242; *Arch. Anzeiger*, 1894, p. 180 (at Odessa).

latter.[1] The two former are each decorated with two figures in a simple, severe, yet effective style; the latter has a B.F. interior (figure of Seilenos), and R.F. exterior with the large eyes, and a warrior on one side only. In the latter case the signature is simply ΦΣΙΑΞΣ, without a verb; on the Odessa vase the imperfect tense ἐποίει is used, the casual use of which is a characteristic of the transitional period.[2] Mr. Hoppin has given several reasons for attributing an early date to those two artists (about 520—500), not the least convincing of which is the use of a B.F. technique and of the large eyes.

We now find ourselves at the point where **Euphronios** forces his way to the front as the great master in the new school of painting in which the influence of Kimon of Kleonae can be traced.[3] Hartwig compares this new departure of art to the Italian schools of painting in the fifteenth century, in which also naturalism and a knowledge of perspective become the characteristics in which they differ most markedly from their predecessors. The early work of the school of Euphronios, which we may place about 500—480 B.C., is best illustrated by the series of cups with the καλός-name Leagros, which must belong to this time. This name is found on two of the vases signed by Euphronios, the Antaios krater in the Louvre and the Geryon kylix in Munich, of which Chachrylion was the potter. The fact that it is found also on some B.F. vases[4] seems to argue, not for its appearance previous to this date, but rather for the view that at the beginning of the fifth century there was still a preference for the old method for certain shapes—the amphora, hydria, and lekythos. It may also be inferred that Euphronios had already appeared on the scene while Chachrylion, Pamphaios, and Oltos were still painting more in the manner of Epiktetos, and hence we are justified in regarding those artists as belonging to the severe style, even though they overlap with the succeeding period.

The labours of Hartwig and other scholars have now made it

[1] *Amer. Journ. of Arch.* 1895, p. 485.

[2] It is used by Andokides, Chelis, Euthymides, Pamphaios, and Nikosthenes.

[3] See Klein, *Euphronios*, *passim*; Hartwig, chaps. vii. xviii.; Murray, *Designs on Gk. Vases*, p. 11.

[4] *E.g.* the B.M. hydria B 325: see Klein, *Lieblingsinschr.*[2] p. 70.

possible to associate an extensive series of vases with the school of Euphronios, but there are only ten in existence which actually bear his signature.[1] They are as follows (the order being roughly chronological) :—

(1) Krater in Louvre, G 103 : Herakles and Antaios; musical performance. Pottier, *Louvre Atlas*, pls. 100, 101.
(2) Psykter in Petersburg, 1670 : Banquet of Hetairae.
(3) Kylix in Munich, 337 : Herakles and Geryon. Furtwaengler and Reichhold, pl. 22 = Plate XXXVIII.
(4) Kylix in Louvre, G 104 : Theseus' adventures. Furtwaengler and Reichhold, pl. 5 ; *J.H.S.* xviii. pl. 14.
(5) Kylix in Bibl. Nat., 526 : Scene from Doloneia (fragmentary). Klein, *Euphronios*,[2] p. 137.
(6) Kylix in Brit. Mus., E 44 : Herakles and Eurystheus. Furtwaengler and Reichhold, pl. 23.
(7) Kylix in Perugia : Achilles and Troilos scenes. Hartwig, pls. 58-9.
(8) Kylix in Berlin, 2281 : Sack of Troy (fragmentary).
(9) Kylix in Boston : Banquet scenes. Hartwig, pls. 47-8.
(10) Kylix in Berlin, 2282 (polychrome) : Achilles and Diomede. Hartwig, pls. 51-2.

In the first three instances he signs ἔγραψεν, in the rest ἐποίησεν.

The Louvre krater shows Euphronios in his early manner, when, as Murray says, "he was in the mood of drawing massive limbs and colossal proportions." The "type" of the Herakles and Antaios is interesting as a reminiscence of the B.F. wrestling-scheme adopted for Herakles and the Nemean lion (see Chapter XIV.). The chief variation is that the figures are posed in a sort of elongated isosceles triangle, no doubt with the intention of showing Herakles' efforts to raise the giant from the earth to which he so strenuously clings. In the form of Antaios we already observe the capacity for rendering a body accurately in different planes which was one of the chief distinctions of the new school. On the other

[1] Hartwig, p. 152, mentions another possible instance, an amphora in the Louvre. All the vases except (9) are published in Klein's *Euphronios*, and all except (8) and (9) in the *Wiener Vorlegeblätter*, ser. 5, pls. 1-7. A few more recent publications are noted in the list.

hand, the agitated female figures in the background are depicted in the old quasi-Egyptian attitudes, with bodies in front view and heads in profile; yet in the treatment of their draperies there is a great advance.

The Geryon cup (Plate XXXVIII.) is a wonderful combination of picturesque and effective grouping with elaboration of detail, and is so far the most naturalistic piece of work that any vase-painter has produced. Here again the old B.F. "type" is retained, at least for the Geryon, who appears as the "three men joined together" of the Kypselos chest,[1] one of whom falls backward wounded. But the whole scene is vivid and instinct with life; even Athena and Iolaos, instead of calmly watching the contest, join in animated comment thereon, and the former seems to be hastening forward to join in the fray. Not the least effective part of the design is formed by the group of Geryon's cows on the reverse, which show that Euphronios was a keen observer of nature and anatomy, and the varied poses and skilful grouping of the herd are striking instances of his art in composition.

As typical of his later manner (about 480—460 B.C.) we may take the British Museum kylix and that in the museum at Perugia. They bear respectively the *καλός*-names Panaitios and Lykos, while the contemporary Berlin cup (2282) has the name of Glaukon. These clearly form a new group, distinct from the Leagros series, and, if the historical identification of Glaukon (see p. 404 above, and Chapter XVII.) is correct, enable us to place them about 470—460 B.C. The interior group of the British Museum cup shows us two figures, a woman standing by the side of a man, who is seated to the front and drawn in a very boldly foreshortened attitude. Their physiognomy, in particular the large prominent nose, is especially characteristic of Euphronios' riper style, and in the treatment of the drapery we distinguish a great advance even on his earlier vases. Not only is it executed with perfect freedom and naturalness, but even different qualities of material are indicated, *e.g.* by the use of fine crinkly lines. The Theseus kylix in the Louvre, which Hartwig regards as the highest

[1] Paus. v. 19, 1.

Kylix by Euphronios (in Munich): Herakles Slaying Geryon.

point of the R.F. style, a study in idealism rather than naturalism, is also conspicuous for its excellence in this respect.

The Troilos kylix in Perugia, which as far as can be ascertained is the latest of Euphronios' works, is interesting, apart from its artistic treatment, as an instance of the current tendency to combine interior and exterior scenes in one whole, representing distinct or successive episodes of a single subject. On one side of the exterior, Achilles, having emerged from his ambush, drags the unfortunate boy by his hair to the altar at which the tragedy is to be consummated ; his horses betake themselves off with flying reins. Meanwhile, on the other side, Troilos' Trojan comrades, as on the François vase, hastily arm themselves in order to come to his rescue. But the interior scene shows us that their efforts are in vain ; the boy, in whose countenance fear and agony are admirably depicted, is about to fall a victim to the sword of his relentless foe, who in a vigorous yet even graceful attitude raises his arm to deal the death-blow. Of the vase as a whole Murray says, "There is no mistaking in it the presence of all the best and strongest qualities of Euphronios, though in a more subdued and more poetic form. His draperies . . . are full of refinement and beauty."

It remains to say a word on Euphronios in another aspect—as a painter in polychrome on white ground. The Berlin cup No. 2282, sadly fragmentary as it is, bears not only the signature of Euphronios, but the *καλός*-name Glaukon, to which we have already referred. The method of painting, to which we have referred on a subsequent page (p. 457), was one just at its height in the middle of the fifth century. The two heads, which are the best-preserved parts of the cup, are remarkable for their breadth and largeness of style, and for their idealising tendency, which recalls the coins of a slightly later period and such works of sculpture as the ephebos-head from the Athenian Acropolis, to say nothing of the sculptures of Olympia.

We must not, however, omit to notice here the views of some recent writers, who are inclined to doubt whether the paintings

on some of these later vases are actually from Euphronios' hand.[1] It is certainly noteworthy that he has ceased to sign ἔγραψε; but to maintain that the ἐποίησε, where no other painter's name occurs, does not include the painting of the vase, is to rest on somewhat negative evidence, and would also lead to the refusal to recognise Chachrylion and other noted artists as the painters of their signed vases. If, however, this view is to be accepted, it would entail the attribution of the scenes on the Troilos cup to *Onesimos*, who painted a cup of similar style in the Louvre,[2] of which Euphronios was the potter. Hartwig thinks that the Berlin cup is not by Euphronios, but would attribute to him a similar fragmentary cup in the British Museum (D 1). The beautiful Aphrodite cup in the same collection (D 2) bears the καλός-name of Glaukon, but in view of what has been said any attempt to attribute it to Euphronios would be dangerous.[3]

We now have to deal with a trio of his contemporaries, men of marked individuality and capacity, who display the same instincts for naturalism and freedom of style, though no one of them rises quite to the height of Euphronios' genius.

Of these **Duris** has left a total of twenty-three signed vases, of which no less than twenty-one are kylikes, the other two being a kantharos and a psykter. He signs almost consistently ἔγραψε, but ἐποίησεν in addition on the kantharos; he employs three potters at different times—Python (who worked for Epiktetos), Kleophrades (who worked for Amasis II.), and Kalliades. Of καλός-names he uses no less than five, the first two of which go together in his earlier period—Chairestratos and Panaitios. The latter name, as we have seen, was used by Euphronios. On the vases in his later manner the names of Aristagoras, Hermogenes, and Hippodamas appear. He seems to have been about ten years the junior of Euphronios, but to what extent he was influenced by him is uncertain. Murray traces the influence of the other in his later manner,

[1] Hartwig, *op. cit.* p. 487; Furtwaengler in *Gr. Vasenm.* p. 110 (denies the B.M. kylix to Euphronios).

[2] Hartwig, pl. 53.

[3] As noted on p. 457, it has been attributed by Furtwaengler (with some probability) to Sotades. For other attributions of vases to Euphronios, see Hartwig, chaps. vii. and xviii.

when he forsakes his old love of figures in repose for subjects entailing violent action. Hartwig, on the other hand, attributes this change to the influence of Brygos; and in any case, it is certain that he never attained to the vitality and freedom of Euphronios.

His style is so marked that it is possible—apart from the evidence of καλός-names—to attribute to him many vases not actually signed by him, as may be gathered from the study of his work by Hartwig.[1] In his earlier vases he shows a strong preference for scenes from the palaestra, and only two are mythological. According to Hartwig it is these vases that show the closest parallelism with Euphronios, both in choice of subject and in treatment. The later works show a great and surprising falling off, and are frequently dull and comparatively careless. They show, in fact, a change from the perfecting of naturalism to mere mannerism, and this in spite of the change in subjects from repose to violent action. It is probable that he fell away from the influence of Euphronios to that of Hieron and Brygos, lacking entirely, as he did, the genius of the older artist. On the other hand, his choice of subjects becomes much more varied, many being heroic or mythological, and among these scenes from the labours of Theseus take the place of the older athletic types (cf. p. 418). He is also fond of banquet-scenes at all times, and found in them scope for bold foreshortening as applied to figures in repose.[2]

The best-known vase by Duris is a kylix in Berlin (2285 = Plate XXXIX.), on the exterior of which are painted scenes from a school. On one side a boy receives instruction in the lyre, while another stands before his teacher reading from a roll on which is inscribed the first line of an epic poem: *Μοῖσά μοι ἀμφὶ Σκάμανδρον ἐύρρων ἄρχομαι ἀείδειν* (see Chapter XVII.). On the other side, the five figures on which exactly balance those on the first, we have a lesson on the flute and in drawing or writing; the seated figure in the middle holds a pen and an open tablet. The fifth figure in each case is a bearded man, seated on a stool watching the proceedings. In the field are suspended lyres,

[1] *Op. cit.* chaps. x. and xxi.

[2] A good instance of this is E 50 in the British Museum.

writing-tables, and rolls of manuscript. There is also a beautiful cup in the Louvre, the interior of which represents Eos with the body of Memnon; the exterior, Homeric combats.[1] Of the three examples of his work in the British Museum, one is occupied with the labours of Theseus (Frontispiece); another (E 49) shows his love of slim nude figures, contrasted with careful and formal drapery. The peculiar shape of the heads should be noticed; also the treatment of the eye, as a circle with a dot in the centre. Like Epiktetos, a slave of precision, he in nearly all these cases avoids violence of action, and seeks after a quiet gracefulness. His peculiarly fine technical skill appears to have been much appreciated in his day.[2]

Hieron has signed twenty-eight vases, all being kylikes except three, which are kotylae. His invariable formula is *ἐποίησεν*, and the signature is generally incised on the handle of the vase. Hartwig is inclined to attribute one or two cups with this signature to another master, who had a preference for introducing bald-headed figures[3]; and, in regard to others, there is fairly certain evidence that they were not painted by him. For instance, a very fine kylix with the carrying off of Helen bears the name of *Makron* as painter,[4] and it is possible that others are actually painted by that artist, who in any case must have been a partner of his. His work is regarded by Hartwig as full of individuality and excellence. Hieron, on the other hand, is inclined to the repetition of certain types, little individualised. He seems to have been trained in the school of Oltos rather than that of Euphronios,[5] except that he learned from the latter the use of foreshortening. His only *καλός*-name is that of Hippodamas, also used by Duris.

His subjects comprise scenes from myth and legend, musical and conversational groups, and Dionysiac scenes. He is fond of decorating his exteriors with rows of men and women of a somewhat sentimental type, smelling flowers, or in amorous converse. But he rises to higher flights in the Berlin cup (2290), with Maenads sacrificing to Dionysos Dendrites, and still more in

[1] *Wiener Vorl.* vi. pl. 7. [2] Murray, p. 12.
[3] See his chap. xvii.: "Der Meister mit dem Kahlkopf."
[4] Hartwig, p. 301. [5] *Ibid.* p. 305.

1

2

1, Kylix by Duris (in Berlin): School Scene.
2, Kylix in Style of Brygos (Corneto): Theseus Deserting Ariadne.

the splendid kotyle in the British Museum (E 140 = Plate LI.), with the gathering of the Eleusinian deities at the sending forth of Triptolemos (see Chapter XII.).

His figures exhibit a strongly marked type of head, large and simple, perhaps developed from those of Duris. But it is in the treatment of drapery that he chiefly excels, especially in the British Museum kotyle and the Berlin cup. Particular mention should be made of the elaborate garment worn by Demeter on the former, with its rich figured embroideries (see Chapter XVI.); and the robes of Persephone, though simpler in decoration, show an even greater richness of treatment in the delicate lines of the chiton and the graceful fall of the mantle. On a cup in Berlin with the Judgment of Paris (Fig. 129) he makes a notable attempt at landscape, showing Paris seated on a rock, surrounded by a flock of goats.

Brygos has only left eight cups, but they are on the whole of a high order of merit. The Acropolis excavations yielded a fragment of his work, showing that the beginning of his career must be placed before 480 B.C. But although he retains some archaisms from his early training, he stands, as Murray has pointed out, on the threshold of the fine style, and in some of his compositions there is a distinctly pictorial tendency. His use of gilding (as on E 65 in B.M.) is also, as with Euphronios in his polychrome cup, an evidence of advanced work. He shows in his work more directness and actuality, as compared with the stateliness and grace of Hieron and Makron, and the infusion of earnestness and animation into his figures is a typical characteristic.[1] He pays more attention to his compositions than to his single figures, but lacks the rhythm of Euphronios.

His subjects are very varied, and cover almost all the vase-painters' ground except the palaestra. Hartwig on this account connects him with the school of Oltos, Hieron, and Peithinos, who preferred erotic and Dionysiac to athletic subjects, and points out that his use of bold foreshortening effects need not connote the direct influence of Euphronios, inasmuch as *κατάγραφα* were by this time the common property of vase-

[1] Murray, p. 15.

painters. It is interesting to note that he uses no καλός-name, and both he and Hieron seem to belong to a time when this fashion was dying out; by the end of the "strong" period it had practically disappeared.

To speak of his vases in detail, the British Museum cup has been praised for the composition and drawing of its exterior designs and its clever foreshortening. The exterior subject is interesting as being derived from a Satyric drama. The difference of scale between the figures of deities and those of the Satyrs reminds us (though there is of course no question of influence) of the similar treatment of the east frieze of the Parthenon. It has been suggested by several writers that the name Brygos implies a Macedonian origin for this painter, and on these grounds a kylix in the British Museum (E 68) has been attributed to him which bears inscriptions in the Macedonian or some kindred dialect—Pilon for Philon, Pilipos for Philippos (see Chapter XVII.). This cup is interesting for the introduction of a new type, that of the young dancing girl.[1] The beautiful cup on Plate XXXIX. (fig. 2) has also been referred to him. Among other interesting subjects are the Triptolemos cup in Frankfurt, the cup with the Judgment of Paris (which may be compared with that of Hieron), and the Sack of Troy cup in the Louvre (Plate LIV.). This latter subject we have already seen treated as a whole by Euphronios, though previously it had only appeared in the form of isolated episodes; but the growing tendency to pictorial treatment of such subjects is well illustrated by the cup of Brygos and the later Vivenzio hydria in Naples.

Peithinos is a master who has been largely rediscovered by Hartwig. Only one cup with his signature is known, a fine example in Berlin (2279) with the Euphronian καλός-name Athenodotos, and the interior subject of Peleus seizing Thetis, treated with great decorative effect. Hartwig traces his style in eight more cups, chiefly with erotic and banqueting subjects, and points out among the former an early instance of sentimentality in vase-painting in the figure of a love-sick man. He characterises his style as "over-ripe archaism," with a slight reversion to the mannerisms of Exekias, and great attention to

[1] See Murray, *Designs*, p. 16; Hartwig, p. 321.

detail in general. He sees in Peithinos the first instance of the pictorial tendency of which we have spoken, contrasting him with Euphronios and other painters who were always in the first instance draughtsmen.

In the Berlin Museum there is a magnificent cup (2278)[1] purporting to be made by *Sosias*, a name which does not otherwise occur.[2] In the absence of indications of the painter, Hartwig and Furtwaengler are inclined to think that the decoration may be the work of Peithinos; but this can hardly amount to more than a matter of individual opinion. It is one of the most sumptuously decorated cups of this period that we possess, but the exterior is unfortunately greatly damaged. In the interior Achilles is represented binding up the wounded arm of his comrade Patroklos. The expressions of the figures and the remarkable foreshortening of Patroklos' right leg are indications of the admirable skill of the painter, whoever he may have been. On the exterior is an assemblage of gods and goddesses to receive Herakles on his entry into Olympos, including seventeen figures in all, distinguished by inscriptions.

In the later chapters of his great work Hartwig has disentangled the styles of several masters of this period, though not in every case is he able to give their names; but some vases can be grouped together by means of καλός-names or by special peculiarities, such as the use of a conventional foliage-ornament. They are, however, for the most part of inferior merit to those of the painters hitherto discussed. Among the painters' names are those of Amasis II., Apollodoros, and Onesimos; the latter has already been mentioned in connection with Euphronios.

Generally speaking, the chief characteristic of the cups of this period is the tendency to treat the interior and exterior as representing successive episodes of one theme,[3] as in the Troilos cup of Euphronios, or at least as having some connection, more or less definite, as in the Theseus cup of the same master.

[1] *Ant. Denkm.* i. pls. 9, 10.

[2] Except in one insignificant instance: see Rayet and Collignon, p. 187.

[3] Murray (*Designs*, p. 5) notes the same characteristic in the cups with *genre* subjects, as in the B.M. examples E 33, 39, 49, 51, 54, 55, 61, 68, 70, 71, 78.

Both in exterior and interior designs the development of composition is very strongly marked, and there is a notable tendency to enhance the effect of interior scenes by rich decorative borders. Even in the work of individual painters a great development is to be observed, showing how rapid the growth of artistic power was at this time; and thus we are able to distinguish in Euphronios and Duris an earlier and a later manner. As Hartwig has said (p. 95), the period of progress associated with the names of Euphronios and Brygos is characterised by an individuality and freedom which were partly the cause and partly the effect of a closer study of nature and an increased capacity for rendering it.

Among other artists of the time, almost the only conspicuous name is that of *Smikros*, the painter of two stamni, in the British Museum (E 438) and Brussels,[1] and also most probably of a "Nolan" amphora in the Louvre (G 107), which is inscribed ΔΟΚΕΙ ΣΜΙΚΡΩΙ ΕΙΝΑΙ, "This is evidently Smikros' work." He signs in both the former cases with *ἔγραψεν*. He appears, says M. Gaspar, as a rival of Euphronios and Duris, but fails in the attempt to equal their achievements in vividness, originality, and faithful reproduction of the human figure. The Brussels stamnos is interesting as representing inscribed persons from ordinary life, just as Phintias (see p. 429) introduces on a vase figures of the artists Tlenpolemos and Euthymides. Klein also attributes to him a krater at Arezzo[2] with the *καλός*-name Pheidiades, which occurs on the signed vases. It is remarkable for the treatment of the subject (Herakles and the Amazons) in the style of the B.F. vases.

The next development of R.F. vase-painting, which presents all the characteristics of the best period of Greek art and of the highest point to which that art attained, is that called the **fine style**. In this the influence of painting first really begins to manifest itself, especially that of the Polygnotan school, which covers the years 470—440 B.C. It is shown alike in composition and in drawing, and to a lesser degree in the colouring; but the general use of colours and gilding on vases really belongs to the

[1] See *Monuments Piot*, ix. pls. 2-3, p. 15 ff.

[2] *Lieblingsinschr.*[2] p. 126 = Reinach, i. 166.

succeeding stage. As regards the drawing, the figures have lost the hardness which at first characterised them; the eyes are no longer represented obliquely, but in profile; the extremities are finished with greater care, the chin and nose are more rounded, and have lost the extreme elongation of the earlier schools. The limbs are fuller and thicker, the faces noble, the hair of the head and beard treated with greater breadth and mass, just as subsequently the painter Zeuxis gave more flesh to his figures in order to make them appear of greater breadth and grandeur, like Homer, who represented even his women of larger proportions.[1]

The great charm of these designs is the beauty of the composition, and the more perfect proportion of the figures. The head is an oval, three-quarters of which forms the distance from the chin to the ear; the disproportionate length of limbs has entirely disappeared, and the countenance assumes a natural form and expression. The folds of the drapery, too, are freer, and the attitudes have lost their old rigidity. It is the outgrowth of the life and freedom of an ideal proportion, united with careful composition. Before the introduction of the Polygnotan style of composition, the figures are generally large, and arranged in groups of two or three on each side, occupying about two-thirds of the height of the vase; but the pictorial influence is more in the direction of smaller figures, grouped at different levels. Figures in full face are now much less uncommon. In some of the larger vases with figures on both sides, such as the kraters, the reverse side is not finished with the same care as the obverse, being intended to stand against a wall, or at least to be less prominently seen.

The career of Polygnotos extends from 478 B.C. to 447 B.C., as far as can be gathered from the various works on which we know him to have been engaged. In 478 he painted frescoes for the temple of Athena Areia at Plataea, in 474 he decorated the Theseion and Anakeion at Athens, in 460 he worked with Mikon on the Stoa Poikile, and from 458 to 447 he was engaged on his great paintings of the *Ἰλίου Πέρσις* and *Νέκυια* for the Lesche at Delphi.[2] As all these paintings are described more

[1] Quint. *Inst. Or.* xii. 15.

[2] This chronology is taken from Robert's *Marathonschlacht*, p. 69.

or less in detail by Pausanias, their subjects form a valuable clue to the investigation of his influence on the vases.

At first, indeed, this is limited to single figures or motives[1]; it is not until about 470 that his method of composition, with its rough perspective and variety of level, finds its way on to the vases. The oldest vase on which these new features appear is the krater from Orvieto in the Louvre,[2] which has usually been placed about 470, though at first sight it appears to be later; but certain small details of an archaic character point the other way. The main subject is a group of Argonauts, which has been

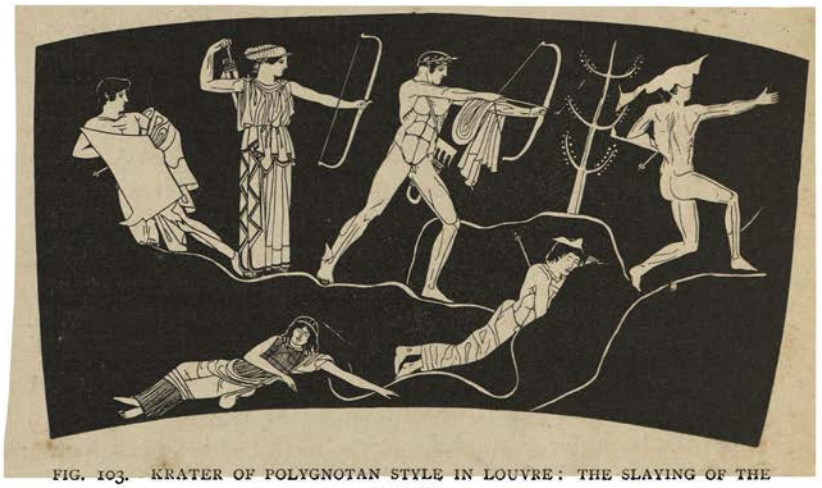


FIG. 103. KRATER OF POLYGNOTAN STYLE IN LOUVRE: THE SLAYING OF THE NIOBIDS.

variously interpreted, but Robert suggests that the scene represents their preparations for departure, and is thus able to associate it with a painting by Mikon in the Anakeion, on which that subject was employed. The various vases which depict the story of Theseus' visit to Amphitrite[3] are referred also by Robert to an original by Mikon in the Theseion (about 470 B.C.). The cup of Euphronios (p. 431) and the Girgenti krater represent a stage of the subject contemporary with that painter; on the Bologna krater we have a reduced version of his work; and

[1] Cf. *Jahrbuch*, ii. (1887), p. 170 ff.

[2] *J.H.S.* x. p. 118. The reverse is illustrated in Fig. 103.

[3] See *J.H.S.* xviii. pl. 14, p. 276 ff.

on the Tricase vase from Ruvo, which belongs to the school of Hermonax (see below) a simpler form of the myth occurs, contemporary with the preceding.

The technique and colouring of Polygnotos' works find their reflection principally in the polychrome vases (see below, p. 455). On the red-figured vases of this period we must look for his influence rather in the arrangement and poses of the figures, the methods of indicating locality, and the attempts at perspective. Professor Robert's ingenious reproductions of his paintings[1] may be profitably compared with such vases as the Orvieto krater, the Blacas krater in the British Museum (E 466 = Plate LIII.), or the somewhat later hydria of Meidias (see below). The principle adopted was that of arranging the figures, not in even rows or in proper perspective, but at different levels, those in the background being sometimes half hidden by rising ground. It is a principle which we shall find even more fully developed in the South Italy vases of the succeeding century; but it was at the time of its appearance quite sudden and unexpected, contradicting at first sight the decorative principles of vase-painting. Polygnotos was also fond of indicating characteristics of his personages or allusions to their history by means of subtle touches or actions. Thus Phaedra was represented in a swing, Eriphyle with her hand on her neck (with reference to the necklace), Theseus and Peirithoos in sitting postures, and so on. This is quite in the manner of the fifth-century vase-painter. Finally, the late F. Dümmler has pointed out that his influence is possibly to be traced in another manner on certain vases, viz. in the use of the dialect of Paros and Thasos for the inscriptions instead of Attic forms.[2] It should be borne in mind that he was a native of Thasos, and would naturally have used his native dialect for the inscriptions over his figures.

The following is a list of vases showing Polygnotan influence:

(1) In types and motives only (470–460 B.C.)[3]:

B.M. E 170, 450, 469; Berlin 2403 = Reinach, i. 450; Naples 2421 = Reinach, ii. 278 and 3089 = Millingen-

[1] See his monographs on the *Nekyia* and *Iliupersis* = *Hallisches Festprogramm*, Nos. 16 and 17 (1892-93).

[2] *E.g.* B.M. E 492; Reinach, i. 217.

[3] See Robert in *Mon. Antichi*, ix. p. 24; *id. Marathonschlacht*, p. 55.

Reinach, 33; Reinach, i. 184 (two vases), 218, 221; *Jahrbuch*, 1886, pl. 10, fig. 2; Millingen-Reinach, 49-50; Furtwaengler, *50tes Winckelmannsfestprogr.* pl. 2[1]; Louvre A 256 = *Jahrbuch*, 1887, pl. 11 (Dümmler).

(2) In method of composition (460—440 B.C.)[2]:

B.M. E 224, E 466, E 492; Berlin 2588 = Reinach, i. 217 and 2471 = *Coll. Sabouroff*, i. 55; Naples R.C. 239 = Reinach, i. 482; Jatta 1093, 1095, 1498 = Reinach, i. 175, 119, 111; Petersburg 1792, 1807 = Reinach, i. 1, 7; Reinach, i. 522, 5 (in Bologna); *Ant. Denkm.* i. 36 (*ibid.*); Reinach, i. 191; and reflecting the style of Polygnotos or of Mikon: Reinach, i. 226-27 = *J.H.S.* x. p. 118 (Louvre); Reinach, i. 232 = *J.H.S.* xviii. p. 277.

To these may perhaps be added:

Naples 2889 = Raoul-Rochette, *Mon. Inéd.* pls. 13-4; Athens 1921 = Reinach, i. 511; Berlin 2326 (see *Jahrbuch*, 1887, p. 172).

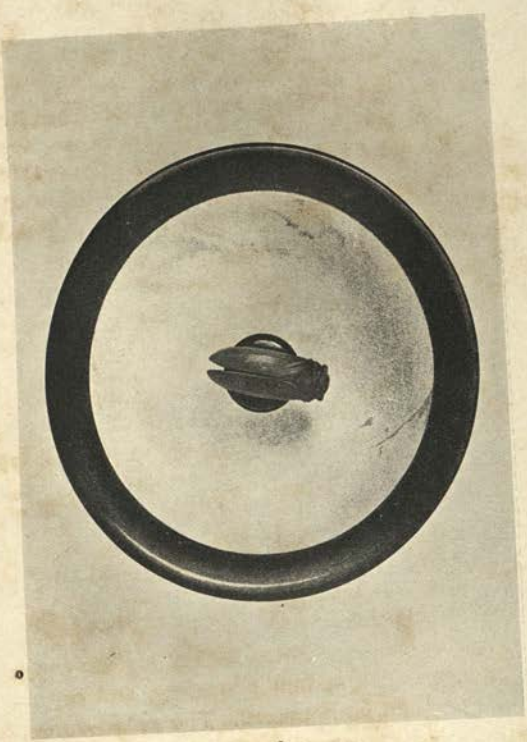
In this stage, as has been noted, artists' signatures are far more rare than in either of the two preceding, and cup-painters in particular are few and far between. The καλός-names, too, have almost entirely come to an end. Of the cup-painters the only known names are those of Aeson, Erginos and Aristophanes, Hegias, Hegesiboulos, Sotades, and Xenotimos, and of these four (Aeson, Hegesiboulos, Hegias,[3] and Xenotimos[4]) are only represented by single specimens. Two very fine cups, made by *Erginos* and painted by *Aristophanes*, are in the museums of Berlin and Boston respectively,—the former decorated with scenes from the Gigantomachia within and without (Fig. 112); the latter has in the interior Herakles rescuing Deianeira from Nessos, on the exterior a battle of Centaurs and Lapiths. An unsigned duplicate of this vase was acquired by the Boston

[1] The type of Orpheus on this vase is clearly derived from Polygnotos; the figure standing with one foot raised, like Antilochos in the *Nekyia*, is a well-known motive of his. See Furtwaengler, *op. cit.* p. 161.

[2] See Robert, *Nekyia*, p. 43; Dümmler in *Jahrbuch*, 1887, p. 170 ff.

[3] Stackelberg, pl. 25.

[4] *Branteghem Cat.* 84 = *Ant. Denkm.* i. 59: see also *ibid.* 85.



1

2

CUPS BY SOTADES.

1, IN BOSTON; 2, BRIT. MUS.: POLYEIDOS IN THE TOMB OF GLAUKOS.

Museum at the same time.[1] The vase by *Aeson* is decorated with scenes from the labours of Theseus.[2]

Sotades stands apart from his contemporaries as an artist of much individuality, with a tendency to great refinement and delicacy in his work. He has left one R.F. kantharos and some half-dozen vases of the white-ground type, two with very interesting subjects (see also p. 457); all but the first were formerly in M. van Branteghem's collection, and these are now divided between the British and Boston Museums. He is remarkable for his extremely delicate cups, with handles in the form of a chicken's merrythought, and he also made two phialae with white interior and moulded exterior painted in rings of red, white, and black; on the interior of one of these a cicala (τέττιξ) is ingeniously modelled so as to appear resting there (Plate XL.). *Hegesiboulos*, one of whose vases was also in the Van Branteghem collection,[3] seems to have been an artist of similar tendencies.

Of the rest, *Epigenes*' name appears on a small kantharos in the Bibliothèque Nationale, and those of *Megakles* and *Maurion* on pyxides. Among the painters who exercised their skill on larger vases the most noteworthy is *Polygnotos*, who has left an amphora and two stamni. The similarity of his name to that of the great contemporary painter has naturally led to conjectures as to a possible connection of the two, which has been discussed by Professor Robert in publishing two of the vases with his signature.[4] His conclusion is that they belong to the period 460—450 B.C., in which the influence of the painter is beginning to make itself felt, but only in isolated figures and motives, not, as in a class of which we shall presently speak, in the composition of scenes. The earliest of the three is the stamnos in Brussels, with the subject of Kaineus overwhelmed by the Centaurs[5]; next comes the stamnos with the combat of Herakles and the Centaur Dexamenos[6]; and lastly the British Museum amphora,[7] which retains an archaic form, but in its

[1] *Report for* 1900, Nos. 17-8.

[2] In Madrid (*Ant. Denkm.* ii. pl. 1). The vase E 84 in the British Museum is very similar, and the style also has affinities with that of Aristophanes.

[3] *Cat.* 167.

[4] *Mon. Antichi*, ix. pls. 2-3, p. 5 ff.

[5] *Op. cit.* pl. 2.

[6] *Ibid.* pl. 3.

[7] E 284 = Reinach, ii. 123.

style and drawing presents no traces of archaism.[1] In the reverses of his vases, with their tendency to meaningless and carelessly drawn figures, we seem to trace the beginnings of the decadence. *Hermonax*, who painted four stamni and a "pelike," seems to be closely associated in style with Polygnotos.[2] Professor Robert would also attribute to a pupil of Polygnotos three fine R.F. cups of about 445 B.C.—the Kodros cup in Bologna (Chapter XIV.) and two in Berlin (2537-38), with the subjects of the birth of Erichthonios, and Aegeus consulting the oracle of Themis.

Nikias, of whom we have only one example, a bell-shaped krater in the British Museum (formerly in the Tyszkiewicz collection),[3] is evidently, from the form of the vase and the style of the paintings, an artist of the latest stage of R.F. vase-painting at Athens. He is, however, remarkable in one respect, namely the form of his signature,[4] which gives not only his parentage but—a unique instance among vase-painters—his deme:

Νικίας Ἑρμοκλέους Ἀναφλύστιος ἐποίησεν.

The subject of the vase is the torch-race, one often found on late Athenian kraters, and seldom at an earlier date.

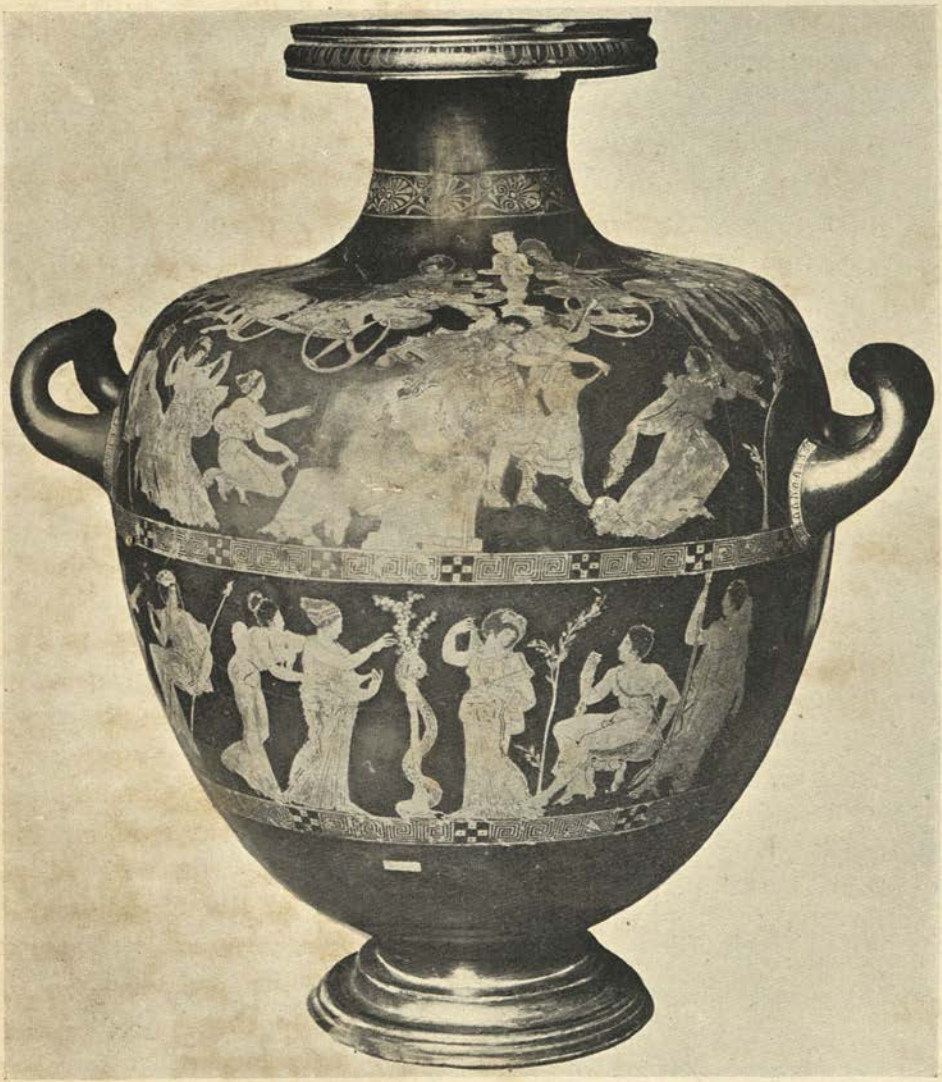
Lastly we have a hydria from the hand of *Meidias*, in the British Museum, which originally formed part of the Hamilton collection (Plate XLI.). Winckelmann estimated it above all other vases known to him, and regarded it as illustrating the highest achievement of the Greeks in the way of drawing. His criticism is hardly even now out of date, in spite of the enormous number that now challenge comparison with it, as far as concerns the beauty and richness of the drawing and of the composition. The artist, says Furtwaengler, "revels in a sea of beauty and grace; youth and charm are idealised in his work." In point of style it belongs to the epoch of the Peloponnesian War, about 430—420 B.C., but so admirable is the work that it can hardly be placed so low as the

[1] Naples 3089 = Millingen-Reinach, 33 is probably also by Polygnotos.

[2] The British Museum pelike with the Birth of Athena (E 410) and the Tricase vase (*J.H.S.* xviii. p. 279) may perhaps be his work.

[3] Froehner, *Tyszkiewicz Coll.* pl. 35.

[4] For facsimile see Chapter XVII.



HYDRIA BY MEIDIAS (BRITISH MUSEUM).

contemporary vases of "late fine" style, with their patent evidences of decadence. Meidias may therefore fairly be included with the foregoing.[1]

The subjects represented are arranged in two friezes all round the vase, the upper containing the rape of the Leukippidae by the Dioskuri—a subject which had been chosen by Polygnotos for his painting in the Anakeion.[2] Not only this, but all the vases with the same subject are doubtless largely indebted to the painting for their ideas, especially in the system of composition with figures at different levels.[3] On the lower row the front view shows Herakles in the garden of the Hesperides, and at the back is a group of Athenian tribal heroes.[4] All the figures have their names inscribed; these, together with the artist's signature, were only first noticed by Gerhard in 1839. Among the details of treatment are to be noted the exquisitely fine lines for the folds of drapery, and the elaborate chequers and other patterns representing embroidery, the occasional use of gilding, the attempts to impart expression to faces by means of wrinkles, and the characteristic rendering of the hair with wavy dark lines of thinned black on a brown wash.

The last artist of Athenian origin who remains to be mentioned is *Xenophantos*, a contemporary of Meidias, whose name appears on a vase found at Kertch and now in the Hermitage at Petersburg.[5] Here he expressly calls himself an Athenian, and it has therefore been supposed that the vase was made on the spot, otherwise it would not be obvious why he should proclaim his nationality (see below, p. 464).

[1] The following vases are in the style of Meidias, though not necessarily from his hand: Athens 1287 = Reinach, i. 342; Naples, S.A. 311 = Reinach, i. 474, 7; *Jahrbuch*, 1894, p. 252; Karlsruhe 259 = Furtwaengler and Reichhold, pl. 30; Reinach, i. 472, 1; 476, 2; 477, 2; 493, 3; Dumont-Pottier, i. pl. 8; Furtwaengler and Reichhold, pl. 59.

[2] Paus. i. 18, 1.

[3] See Robert, *Marathonschlacht*, p. 97; *Nekyia*, p. 42. On late R.F. vases with double friezes see Winter, *Jüngere attische Vasen*, p. 69, and *Röm. Mitth.* 1897, p. 102. The principle is frequently adopted in the vases of Apulia (*e.g.* Plate XLV.); for early Apulian examples see p. 485.

[4] See *J.H.S.* xiii. p. 119.

[5] *Cat.* 1790 = *Ant. du Bosph. Cimm.* pl. 46 (in colours) = Reinach, i. 23. For a curious imitation of this vase, see Naples 2992.

The chief feature of the vase—a lekythos of the "bellied" type so common at this stage—is the use of figures moulded in relief and applied to the surface, in conjunction with gilding and a lavish use of white colour. The subject is the Persian king hunting.

The vases of the **late fine** style, into which the "fine" style merges about the year 430 B.C., may be divided into two classes,—that of the larger vases, chiefly kraters, in which the pictorial traditions of the Polygnotan vases are carried on and developed, and the influence of contemporary art makes itself felt; and that of the smaller types, such as the pyxis and the wide-bellied lekythos, in which new features and new subjects are introduced (cf. Plate XLII.).

The former class is chiefly made up of the vases found in Southern Italy, in the Crimea, the Cyrenaica, and the Greek islands, which are apparently of Athenian, not local, fabric; but they are comparatively rare at Athens and in Greece Proper, where the smaller vases have been found in considerable numbers. It may be found convenient to deal first with the latter, as more typically Athenian, while the larger vases serve as a connecting-link with the succeeding fabrics dealt with in the next section.

In these vases linear drawing reaches its limits in respect of perfect freedom and refinement of detail; but it is at a severe cost. The artist seems to have lost interest in his subject when it no longer required an effort to execute it, and is content to decorate his vase with a few stock figures in conventional attitudes, uncharacterised by action or attribute. Frequent faults of design may be observed, such as coarseness of drawing or negligence in the laying on of the black varnish. The artist works by routine, and appears to be nonchalant and bored. Mythological scenes become exceedingly rare, and are confined to Dionysos or Aphrodite with their attendant personifications, and the compositions are fanciful or decorative in character, without any suggestion of particular events or actions. The all-pervading presence of Eros is another feature which is new to vase-painting, but henceforward his position is established. An even greater novelty is the preponderance

To face page 448.

VASE OF "LATE FINE" STYLE.

(BRITISH MUSEUM).

of subjects connected with the daily life of women or children—the toilet, the occupations of every-day life, or nuptial ceremonies; and a whole series of small jugs, themselves in all probability toys, depicts the various games in which the Athenian child delighted—the hoop, the go-cart, and the ball, or his pet animals (cf. Plate XLII.).

The shapes most popular in this group are, as we have indicated, the oinochoë, the wide-bellied lekythos, and the pyxis (Plate XLII.). Milchhoefer, in a most important article,[1] regards the lekythi as more instructive than any other group for illustrating the later developments of R.F. vase-painting. Beginning with early examples of the fine style,[2] they extend to the very end without any gaps, the tradition being further continued in Apulia. They exhibit a development from simple to rich compositions, from "strong" style to perfect freedom. In the latest examples, such as that by Xenophantos, we see the straining after novelty which marks the decadence, in the introduction of figures in relief applied to the surface of the vase, as well as in the increase of polychromy and gilding. Among the finer vases we may note a hydria at Karlsruhe (259) with the Judgment of Paris, in which may be traced the hand of Meidias; the lekythos in the British Museum from Cyprus (E 696), with Oedipus slaying the Sphinx, in which the figure of Athena with its white coating is clearly reminiscent of the gold-and-ivory Parthenos statue; and two pretty lekythi from Apollonia, in Thrace, with the subject of incense-gathering. There are also two pyxides in the British Museum (E 773-4), on which are groups of women, with fancy names added to give interest to the scene: thus Klytaemnestra, Danae, and Iphigeneia occur all together, and the Nereids are engaged in the every-day occupations of the women's apartments.

From a technical point of view, the principal change is in the increased use of gilding and polychrome colouring. The former, employed exceptionally by Euphronios and Brygos, now becomes the rule, and concurrently the use of white for flesh-tints, as in the figure of Athena just mentioned, and

[1] *Jahrbuch*, 1894, p. 57 ff.

[2] Naples 3135, according to him, is contemporaneous with the B.M. Aphrodite cup (D 2), about 460 B.C.

of red, green, and blue for draperies, becomes more and more general. The gilding was applied for small details, such as wreaths, and for the hair; and the places where it was to be applied were marked by low relief. It was fixed in the form of gold-leaf by means of a yellowish gum. Jahn, who some years ago collected the list of vases with gilding,[1] reckoned fifty-one known to him, chiefly from Kertch; and Heydemann and Collignon[2] have since added several to the list, chiefly from collections at Athens. They have been found not only in Athens and Kertch, but at Corinth, Megara, Hermione, Thebes, and in Acarnania and Thrace.

In the larger vases of this period the pictorial method of the preceding phase is, as might have been expected, greatly developed. Among the vases of undoubted Attic origin we have, first of all, the Meidias hydria and its companion vase, the Karlsruhe hydria with the Judgment of Paris[3]; and, secondly, the great Gigantomachia vase from Melos in the Louvre, which contains no less than forty-seven figures.[4] Another fine instance is the polychrome Kameiros vase in the British Museum with the subject of Peleus and Thetis. Robert[5] sees in the two latter a possible influence of Parrhasios, who is known to have paid great attention to drawing, and, in reference to the Kameiros vase, draws attention to the plastic silhouette effect of the figures. Parrhasios' art consisted in giving this effect by his linear drawing.[6] The influence of Zeuxis is less apparent, though from his earlier date it might more naturally have been expected.[7]

It is, however, still more instructive to trace in this group the influence of the Parthenon sculptures, which, where it can be observed, enables us to date the vases approximately as at any rate not earlier than 438 B.C. On the other hand, it must be borne in mind that sculptor and painter may

[1] *Vasen mit Goldschmuck* (1865).

[2] *Gr. Vasenbilder*, p. 2, pl. 1, fig. 3, pl. 9, fig. 1; *Rev. Arch.* xxx. (1875), pp. 1, 73, pls. 17-20. See also Berlin 2661 = Rayet and Collignon, p. 257, and 2705 = Reinach, i. 426, 2.

[3] Of similar style are the fragment Naples 2664 = Reinach, i. 181, and Athens 1259 = Reinach, i. 506.

[4] *Mon. Grecs*, 1875, pls. 1, 2.

[5] *Marathonschlacht*, p. 74.

[6] Cf. Quint. xii. 10, 3, and Pliny, *H.N.* xxxv. 67.

[7] See Robert, *Iliupersis*, p. 35.

often have gone back to the same original type. This explains the appearance of apparently Pheidian motives on vases of an earlier style—such as riding youths, water-carriers, etc.—or the similarity of composition on one of the Parthenon metopes and a vase of undoubtedly earlier date.[1] But in one or two instances there can be no doubt of such influence, most notably in the Athena and Poseidon vase from Kertch (see below, p. 464). It cannot be without significance here that the two figures are actually in relief on the vase, and the parallelism with the pediment (so far as we know the design) is so close that a copy of it was manifestly the vase-artist's intention. Mention has already been made of a figure of the Parthenos on a vase of this period, and another instance, though not on a painted vase, may be noted in the polychrome bust of the goddess in terracotta from Athens, now in the British Museum.[2] Some instances of this type on vases may be earlier than the statue; it was not created by Pheidias.[3]

It has already been mentioned that there is one exception to the Athenian monopoly of vase-making in the fifth century, and this is in the local fabrics of Boeotia. Of the Kabeirion vases, which, though in the B.F. technique, belong to this period, we have already spoken. There remains a small class—only five examples are at present known—which appears to have been made at Tanagra. All five evidently came from the same workshop, and in three cases the provenance is certainly known. Two are in the British Museum (E 813-4), and three in the Museum at Athens.[4] With the exception of E 814 in the British Museum, which is a pyxis, all are small two-handled cups, with low feet. The designs are outlined on a background of yellow clay in a black-brown pigment, the lines being coarsely drawn. Inner details are indicated by means of thinned-out pigment. That they are of Boeotian origin is further shown by the ornamentation: the pyxis has

[1] Cf. Michaelis, *Parthenon*, pl. 4, 25, with a vase in the Vatican (Baumeister, i. p. 746); and see *Jahrbuch*, 1887, p. 177, and Roscher, i. p. 1355.

[2] E 716 = *J.H.S.* xv. pl. 5.

[3] See *Jahrbuch*, 1894, p. 69.

[4] Nos. 1119-20, and one uncatalogued.

round the sides rows of vertical wavy lines, such as are often seen on the Boeotian geometrical fabrics (p. 288), and also an ivy-leaf which recalls the Kabeirion ware. The ornamentation of the hangings round the chair on Athens 1120 exactly resembles the patterns indicating the drapery on some of the early Boeotian terracottas.[1] The subjects, on the other hand,

FIG. 104. BOEOTIAN KYLIX (BRITISH MUSEUM): GIRL PLAYING KOTTABOS (?).

seem to suggest Athenian prototypes: in the designs much archaism is to be observed—such as defects in perspective, the rendering of the eyelashes, and the drawing of the feet in profile, but with toes in front. Numerous small details point to a date late in the fifth century, which, in view of the conservative tendencies of Boeotia, is not unlikely.

[1] Cf. *B.M. Cat. of Terracottas*, B 57-8.

The subjects are of some interest, and include two figures of Herakles, one bearded, the other youthful; a girl playing kottabos (Fig. 104); and a cultus-image of an enthroned Chthonian goddess (Demeter or Persephone), holding a torch, ears of corn, and poppies. These vases have been collected and fully discussed in an interesting article by Dr. S. Wide.[1]

[1] *Ath. Mitth.* 1901, p. 143 ff.; with pl. 8.

CHAPTER XI

WHITE-GROUND AND LATER FABRICS

Origin and character of white-ground painting—Outline drawing and polychromy—Funeral lekythi—Subjects and types—Decadence of Greek vase-painting—Rise of new centres—Kertch, Cyrenaica, and Southern Italy—Characteristics of the latter fabrics—Shapes—Draughtsmanship—Influence of Tragedy and Comedy—Subjects—Paestum fabric—Lucanian, Campanian, and Apulian fabrics—Gnathia vases—Vases modelled in form of figures—Imitations of metal—Vases with reliefs—"Megarian" bowls—Bolsena ware and Calene phialae.

§ 1. WHITE-GROUND VASES

THE method of painting on a white ground, which was brought to such perfection in the fifth century, really requires a section to itself, its development being parallel to, yet different from, that of the painting in red on black. Its genealogy can be traced almost throughout the period of Greek vase-painting, beginning with the Ionian fabrics of Rhodes and Samos, through the more developed vases of Naukratis and Kyrene, until it was introduced at Athens in the latter part of the sixth century, perhaps, as we have seen (p. 385), by Nikosthenes. The method was not, of course, new then to Continental Greece. It was the one usually employed for painting votive tablets or pictures on wood, the surface of the tablet being prepared by covering it with a thick slip of creamy-white lustrous character, known as λεύκωμα.[1] Thus it is used in one of the few examples known of Attic painting, apart from the vases, the Warrior pinax from the Acropolis, which may be dated about 500 B.C., and stands midway between frescoes and white-ground vases (see above,

[1] See Hesych. *s.v.* πινάκιον; Athenag. *Leg. pro Christo*, 17, p. 293; also p. 316.

p. 397). Possibly the idea of the white slip was to get the effect of painting on marble such as we see in the tombstones of Lyseas and Aineos.[1]

This method was adhered to throughout the fifth century by all the great painters, such as Polygnotos, and hence the importance to us of the white-ground vases of that time, as reflecting their methods, and in a miniature form the appearance of their works. In the fifth century the all-important consideration in a picture was perfection of design and composition; colouring was relatively unimportant, and the technical processes exceedingly simple, three or four colours alone being employed. Cicero[2] tells us that Polygnotos, Zeuxis, and Timanthes only used four colours—black, white, red, and yellow. It is interesting to note that these are just the four colours we ordinarily find on the polychrome vases, the flat tints so frequently employed being no doubt suggested by the mural paintings.

To go back to the earlier Athenian vases with white ground, we observe that at first the method of painting in silhouette, in the manner of the ordinary B.F. vases, obtains exclusively.[3] About the beginning of the fifth century this method is superseded by what we may regard as a transitional class, in which the figures are painted partly in silhouette, partly in outline, the simple black-on-white design being preserved, with a very occasional use of purple or yellow.[4] According to Winter, the origin of outline drawing of this kind may be found in the partly outlined female heads which are found on some of the minor artists' cups, such as those of Sakonides, Eucheiros, and Hermogenes.[5] We need not go as far as he does in explaining the *catagrapha* of Kimon (see p. 397) as the replacement of mere silhouettes by outline drawing, so as to give individuality and variety to faces; but the vases which he publishes are remarkable for the highly developed character of the heads depicted

[1] See Loeschcke in *Ath. Mitth.* 1879, p. 289 ff. The revision of chronology since his article was written has only served to give additional support to his view, bringing the white vases nearer in date to the painted stelae.

[2] *Brut.* xviii. 70: see also Plut. *de defect. orac.* 47, 436 C; Pliny, *H.N.* xxxv. 50.

[3] See *B.M. Cat. of Vases*, ii. B 613 ff.

[4] Winter in *Arch. Zeit.* 1885, p. 195 ff.

[5] *Ibid.* p. 187 ff.: cf. also Hartwig in *Jahrbuch*, 1899, p. 160.

thereon.[1] One in particular is more like a head by Euphronios than one of the Epictetan cycle, to which it must belong in point of date. But it must be remembered that Epiktetos and his school were still hampered by archaic conventions, while the painter on a white ground was carving out the way to perfect freedom.

The shapes employed for the new white-ground technique are much the same as those used in the previous period—the kylix, the lekythos, the oinochoë, the pyxis, and the alabastron.[2] But of these only one retains its popularity for any length of time; in fact, after the middle of the fifth century it is the only one employed at all. This shape is the lekythos, on which, indeed, alone the whole development of white-ground painting can be traced from the B.F. types down to the fourth century, when it finally disappears. Although not exclusively the sepulchral vase (as may be seen from the appearance of other vases on tombs in the painted funeral scenes[3]), yet for some reason it came to be regarded as the proper shape for such purposes, and the fashion of making white lekythi exclusively for the tomb, and decorated as a general rule with funerary subjects, prevailed for about a hundred and fifty years. We have elsewhere (pp. 132, 143) noted instances of its use recorded by Aristophanes.

The introduction of polychromy is a gradual development. At first, as we have seen, colour is very sparingly employed, only in the use of a brownish yellow (produced by thinning out the black) for details or washes, or of a purple or pinkish brown. Subsequently the outlines are drawn in black or brown, and filled in with black, brown, or purple washes; the occasional use of a clear, thick, white pigment, standing out against the cream background, is also to be noted[4]; and next a wash of bright red or vermilion is employed. In the final stages of polychrome painting, during the fourth century, the range of colours is greatly extended, and blue or green are employed

[1] *Arch. Zeit.* 1885, pl. 12. Cf. B.M. D 22, 32; Dumont-Pottier, i. pl. 11; Rayet and Collignon, pl. 10, 1. The severe type of face should be compared with Attic coins of the fifth century.

[2] Cf. *Arch. Zeit.* 1881, p. 35.

[3] Cf. B.M. D 65 and Fig. 19, p. 143.

[4] *E.g.* B.M. D 21, 33.

To face page 456.

VASES WITH POLYCHROME DESIGNS
ON WHITE GROUND.
(BRITISH MUSEUM).

in addition to those already named. The outlines are also painted in the vermilion colour already mentioned, instead of the black in previous use. Up to the end of the fifth century the colouring always preserves a character of soberness and austerity; and such a feature as the use of gilding[1] is quite exceptional.

Some of the white-ground kylikes are only partially so; the exterior is painted in the ordinary R.F. manner, of the "strong" style, as in the case of the Anesidora cup in the British Museum. On the other hand, a fine cup at Gotha has a red-figured interior and polychrome exterior.[2] In the Munich collection there are three very beautiful cups of this kind.[3] The interior subjects are respectively Europa on the bull, a frenzied Maenad, and Hera. The cup with the Maenad is attributed by Furtwaengler to the style of Brygos, and may therefore be dated about 470—460 B.C. It is rare to find a large vase decorated in this method, but there is a very fine krater of the calyx type in the Museo Gregoriano at Rome,[4] which has been attributed to the middle of the fifth century (contemporary with Euphronios' later manner); the subject is the delivery of the infant Dionysos to the nymphs of Nysa, and is painted throughout in polychrome on a white ground. Of late years some very fine pyxides in this style have been found in Greece,[5] often decorated with marriage scenes, the style of the painting being contemporary with Duris and Brygos. But for beauty and delicacy all are surpassed by some of the smaller cups, above all the Aphrodite cup from Kameiros in the British Museum,[6] in which refinement and grace are combined with boldness of conception and accuracy of drawing in a marvellous degree. Or, again, the group of cups and bowls by Sotades (see above, p. 445),[7] some with mythological or other

[1] As on the Anesidora cup in the British Museum (D 4) and the Euphronios cup in Berlin (2282).

[2] *Mon. dell' Inst.* x. 37*a*; *Annali*, 1877, p. 287.

[3] *Cat.* 208, 332, 336; published in Jahn, *Entführ. d. Europa*, pl. 7; Furtwaengler and Reichhold, pl. 49 (Fig. 121); and Overbeck, *Kunstmythol. Atlas*, pl. 9, No. 19.

[4] Rayet and Collignon, p. 223: see *Anzeiger*, 1891, p. 69, where it is attributed to Sotades.

[5] *E.g.* B.M. D 11 = Plate XLIII. fig. 1; *Mon. Grecs*, 1878, pl. 2 (in Louvre).

[6] Also attributed by Furtwaengler to Sotades (*Anzeiger*, *loc. cit.*).

[7] Formerly in the collection of M. van Branteghem: see his Sale Cat. Nos. 159-66, and Plate XL.

subjects painted in minute and graceful style, others of fantastic or unusual shape and decoration, form a unique series among the white-ground vases.[1]

To sum up in the words of A. S. Murray the characteristics of these vases[2]: "There was thus in the white vases an exceptional opportunity for purity of outline in the drawing, and it is not without reason that they are regarded as the best representatives we yet possess of the great age of Greek fresco-painting, in which also purity and sweep of outline on a white ground, simplicity of composition, and a limited scale of brilliant colours, were the chief characteristics."

It remains now to speak of the funeral lekythi as a distinct class, their subjects and method of treatment.[3] Although it was formerly customary to speak of "vases of Locri" or "vases of Gela" in speaking of examples found on those sites, it is almost certain that they are all really of Athenian origin.[4] Apart from the fact that the great majority have been found at Athens, there are no special peculiarities about those from other sites which would justify any such distinction of fabrics. The same remarks apply to the numerous examples which have been found of late years at Eretria in Euboea, and have caused some recrudescence of the theory of non-Attic origin.[5] But Eretria was so near to Athens that importation must have been quite a simple matter. In regard to the Locri vases, it has been noted by M. Pottier[6] that they seem to represent an *inferior*, though still Athenian fabric, in which the white is more lustrous and less flaky than in the better examples, and the outlines are in black exclusively. Black silhouettes are occasionally found, and the subjects are not necessarily funerary.

The funerary subjects fall into four classes; they will be enumerated in Chapter XV., where examples of each class are

[1] A complete list of white-ground cups is given by Hartwig, *Meistersch.* p. 499. Among signed examples are the Euphronios cup in Berlin (2282); those by Sotades and Hegesiboulos (p. 445), and also *Mon. dell' Inst.* x. 37*a* (—*νις ἐποίησεν*).

[2] *White Athenian Vases*, p. 5.

[3] See generally Pottier, *Les Lécythes Blancs*.

[4] In the B.M. collection, D 52 is from Locri, D 28, 47, 63, 87 from Gela.

[5] *E.g.* B.M. D 33, 54-7, 62; Athens 1625 ff.

[6] See Dumont-Pottier, ii. pp. 50, 53.

given, but may be briefly recapitulated here, in order to note some artistic considerations.

(1) The *Prothesis*, or laying-out of the corpse (Plate LV.).

(2) The *Depositio*, or laying of the body in the tomb: chiefly in the Thanatos and Hypnos type (see Fig. 123, Chapter XIII.).

(3) *The Journey to Hades;* Charon in his bark (see Fig. 122, Chapter XIII.).

(4) *The Cult of the Tomb*, this being by far the most common of the four classes (see Plate LV. and Fig. 19, p. 143).

The *Prothesis* type is an old one, occurring not infrequently on black-figured vases, especially on the slim "prothesis-amphorae" which are sometimes found at Athens. M. Pottier reckons ten examples, to which may be added a fine specimen now in the British Museum (Plate LV., fig. 1). The *Depositio* type is somewhat rare; it is occasionally found in B.F. vases[1] but is usually idealised, the body being carried by winged genii, to whom the names of Thanatos and Hypnos are usually given. The type, as has been pointed out elsewhere, is originally mythological, being derived from that of the burial of Memnon. Some half-dozen examples are known (see Chapters XIII., XV.). Of the Charon vases M. Pottier reckons twenty-one, which he classifies under three heads: (1) Charon on the left in a boat, which two or three persons enter. (2) Charon on the right in a boat; persons ready to enter. (3) The deceased is seated on a stele at which women make offerings; Charon approaches in his boat.[2] The conception is essentially a pictorial one, and it may reasonably be inferred that it is a reflection of Polygnotos. The same subdued pathos and the same style of composition are characteristic of his paintings. Pausanias, in describing his *Nekyia* in the Lesche at Delphi, says: "There is water, which seems intended for a river, evidently the Acheron, and reeds growing therein . . . and there is a boat on the river, and the ferryman at the oar."[3]

[1] Notably Athens 688 = Reinach, i. p. 164 (*Mon. dell' Inst.* viii. pl. 4).

[2] For references to this subject on the lekythi see Chapter XIII., and for a typical example, *ibid.*, Fig. 122. For the different types see (1) Athens 1662-63; (2) B.M. D 61; (3) Berlin 2680-81, Athens 1661.

[3] x. 28, 1.

In the vases representing the Cult of the Tomb (Plate LV. and Fig. 19), the normal type is that of two or three persons bringing offerings, wreaths, vases, etc., to a stele[1] ornamented with coloured sashes, or engaged in conversation thereat; sometimes one sits on the steps of the stele. The persons with offerings are usually feminine; where men occur, they are either attired as warriors, or stand leaning on a spear or staff, conversing with the women. The correspondence of some of these compositions to the "type" of Orestes and Electra meeting at the tomb of Agamemnon has more than once been noticed, but it does not seem here to be a case of borrowing the heroic "type," as in the Thanatos and Hypnos instance. Where such scenes can be identified on vases,[2] they are all of late date and mostly of South Italian manufacture; and we may rather suppose that the contrary was the case, and that the lekythos "type" was idealised and borrowed for the Orestes scene. Moreover, the popularity of the latter subject is probably largely due to its treatment by the tragic poets.

Among other details of interest in these scenes may be noted the appearance of the εἴδωλα or ghosts of the deceased, represented as tiny hovering winged creatures. M. Pottier has noted eighteen instances, and the number has since then been greatly increased.[3] The invariable youthfulness of the figures—which, it may be remarked, are always purely impersonal, and mere *types* of mourners—is noteworthy as a characteristic of later fifth-century art, which tended to create ideals of youth and beauty.[4] This, of course, is everywhere apparent in sculpture, as in the Parthenon frieze and the works of Polykleitos; and reminiscences of Pheidian youthful types may be suggested by some of the figures on the lekythi.[5] In the figures of deities the same change was going on, as in the case of Hermes, and even the aged and grim figure

[1] On the forms of the stele see Brueckner, *Ornament und Form der attischen Grabstelen.*

[2] As for instance Naples 1755 = Baumeister, iii. p. 1848, fig. 1939. See also Roscher, iii. p. 967; B.M. F 57.

[3] Cf. also B.M. D 54; Pottier, pls. 2, 4; and see Chapter XIII.

[4] We may recall the *dictum* of Aristotle (*Poet.* 2) that Polygnotos painted men better (or more beautiful) than reality.

[5] *E.g.* B.M. D 54, D 56; and another with horsemen unpublished.

of Charon is toned down on the funeral vases to a more humane conception. It has also been suggested that the choice of youthful figures is due to the thought that youth is the period when bereavement produces its simplest and most natural effects.

The influence of the sepulchral stelae of the fifth and fourth centuries soon begins to be apparent in the lekythi, especially in the scenes of tomb-offerings.[1] Like the vases, the stelae always varied in merit, some being refined and artistic compositions, others poor and commonplace. The choice of subjects, indeed, differs in some degree, the subjects on the stelae relating chiefly to the previous life of the deceased, those of the vases to the actual death and burial. But there are many lekythi, the subjects on which are more like those of the stelae, not being strictly funerary.[2] Thus we see the deceased as a warrior charging with a spear or on horseback, like the Dexileos of the Kerameikos; the young hunter pursuing a hare; the lady at her toilet with mirror or jewellery in hand, attended by her maidens, like the charming Hegeso (Plate XLIII.); or the warrior parting from his spouse.

Regarding the funeral lekythi in their artistic aspect, we note, as M. Pottier points out, two main characteristics—restraint and uniformity of composition. The space for the decoration being limited to about two-thirds of the whole circumference, the figures are necessarily few in number, varying from one to three, but very rarely more. Emotion and pathos are produced by the simplest means. Murray instances the prothesis lekythos in the British Museum (Plate LV. fig. 1) as an example of deep pathos expressed in a simple, yet strong and rapid manner, and two others (D 70 = Plate LV. fig. 2, and D 71) as showing almost tragic emotion expressed only by a few outlines. Uniformity of composition is manifested in the repetition of types, often copied from familiar models, yet with an infinite variety of detail (as, for instance,

[1] It may be noted conversely that Attic tombstones were often in the form of lekythi (e.g. *B.M. Cat. of Sculpt.* i. Nos. 681-82, 687 ff.).

[2] See the list of non-funerary subjects given by Pottier, *op. cit.* p. 5. Cf. also B.M. D 21, 51, 57, D 19 and 24 (Nike), 31 (Iris), and 23 (priestess of Athena).

in the form of the stelae) which does not affect the constancy of the main idea. In this respect they may be compared with the terracotta Tanagra figures, of which many are turned out from the same mould; yet by varying the pose of the head or position of the arms the artist was able to avoid the absolute identity of any two figures.

The lekythi can hardly be classified chronologically; we cannot say to what extent the rougher examples may be earlier, and *vice versa*; but even in the poorest examples skill and lightness of touch are always discernible. The classification given by M. Pottier,[1] however, may serve as a general indication of chronological succession and development. He collects them under three heads, as follows:

(1) The paste is of a light red colour, the walls thin, and the white slip unpolished; the main design is first sketched, then painted, the outlines being usually in red. The ornaments are palmettes and maeander, in black and red, the subjects almost exclusively funerary. The slip and colours are delicate, the style fine, and the polychromy restrained.[2]

(2) The paste is grey, the walls thicker; the white is sometimes polished, and the outlines black or brown. The ornaments are palmettes and maeander, with crosses or stars, in black only. The subjects are funerary or from daily life, with figures of deities; the style is still fine, but the polychromy is more varied.[3]

(3) The clay is red and light, the white unpolished, the outlines yellow. The slip is not extended to the shoulder, on which is a tongue-pattern in black; the maeander is careless. The subjects are either funerary or from daily life, the style negligent; the designs are almost entirely monochrome.[4]

§ 2. The Decadence of Greek Vase-Painting

We have now reached the point at which the centre of ceramic industry is no longer to be found at Athens, but

[1] *Lécythes Blancs*, p. 103.

[2] Examples are: Benndorf, *Gr. u. Sic. Vasenb.* pls. 26, 33.

[3] *E.g.* Athens 1626; Benndorf, pl. 18, fig. 2, pl. 20, fig. 2.

[4] *E.g.* Benndorf, pl. 24, figs. 1, 3.

must be sought in distant colonies in various parts of the Mediterranean. The extinction of vase-painting as a decorative art at Athens was brought about as much by political events as by sheer artistic decadence at the end of the fifth century. It had until recent years been customary to assume that red-figured vases continued to be made at Athens through the greater part of the fourth century; but the evidence of excavations on many sites has been too decisive for the maintenance of such a view. That certain classes of ceramic products, such as the Panathenaic amphorae and the funeral lekythi, still continued to be made we have already seen; but these are only exceptions, and due entirely to their religious associations.

The evidence for the revised chronology has been summarised by Milchhoefer in a paper already referred to,[1] in which he pointed out the importance of historical considerations. Even during the Peloponnesian War the manufacture and export of painted vases must have been much crippled, and the absence of the later Athenian wares from the tombs of Etruria clearly shows that commercial relations between the two countries had ceased.[2] Similarly intercourse with Campania largely ceased after the Samnite invasion of 440 B.C., and relations with Sicily must have been entirely broken off after the outbreak of hostilities with Syracuse in 427.

Again, in the city of Rhodes, which was founded in B.C. 408, no Attic vases have been found, while all those from Kameiros must be earlier than that date.[3] In Athens itself no R.F. vases of any importance have been found in fourth-century tombs, although some fragments of fine style are reported from the tomb of Dexileos, which is not earlier in date than 394 B.C.[4] Hence the conclusion is irresistible that no good Attic R.F. vases can be assigned to the fourth century, which is only represented at Athens by the funeral lekythi, the

[1] *Jahrbuch*, ix. (1894), p. 57 ff.

[2] Milchhoefer attributes this to Hiero's victory in 474; but the date seems too early compared with other evidence.

[3] The latest R.F. vase from Kameiros is the polychrome "pelike" E 424 in the British Museum. Furtwaengler (*Gr. Vasenmalerei*, p. 205) gives reasons for dating it in the third century; but the circumstances of its discovery at Kameiros render so late a date improbable, apart from considerations of style.

[4] Hartwig in *Mélanges d'Arch.* 1894, p. 11.

Panathenaic amphorae, and a few isolated, generally inferior, R.F. specimens.

The new centres of vase-painting, from about 400 B.C. onwards, are three in number—the Crimea, the Cyrenaica in North Africa, and Southern Italy. Among the vases from the Crimea[1] are some of the most magnificent that we possess, which in spite of their florid style and careless technique are really of considerable merit. They can, however, hardly be considered to rank more highly than the best of the products of Southern Italy, which we are now about to consider; in other words, they belong to a later stage of development than the "late fine" style of Attic R.F. vases, as represented by the Rhodian "pelike" with Peleus and Thetis in the British Museum, and the Gigantomachia vase from Melos in the Louvre. The fine krater with the contest of Athena and Poseidon at Petersburg (Plate L.) is clearly a reminiscence of the Parthenon pediment, and, allowing for the difference of style, cannot be earlier than the closing years of the fifth century. Again, there is the vase signed by Xenophantos,[2] who, as we have seen, expressly calls himself an Athenian, and on this ground has been regarded as a resident in Panticapaeum (Kertch). The reliefs with which this vase is partly decorated are examples of a tendency which hardly came into existence before the fourth century; the subject also is more suggestive of local taste.

It may be an open question whether these vases were imported from Athens, but at least the vase of Xenophantos testifies to the existence of a local fabric at Panticapaeum, and it is not at all unlikely that the general upheaval brought about by the Peloponnesian War led to a dispersion of Athenian artists, and thus to the continuance of their art in other lands, but not in Athens itself. We shall see that this largely accounts for the origin of the fabrics of Southern Italy. In any case Panticapaeum was a place of considerable importance in the fourth century, being the chief place whence

[1] See above, p. 60, for the sites on which they have been found; also the plates of the Atlas to Stephani's *Compte-Rendu* and of the *Ant. du Bosph. Cimmérien.*

[2] See above, p. 447.

the Athenians obtained their supplies of grain, as we learn from the orations of Demosthenes, such as the *Contra Phormionem.*

With the Cyrenaica circumstances were no doubt little different. But the vases from this site, though similar to those of the Crimea, are mostly inferior, of small size, and often of very rough character. Like the former they exhibit a preference for polychromy and gilding. Similar fabrics are also found in the Greek islands, such as Karpathos and Telos, in the Troad, and elsewhere,[1] but for the most part of a very inferior character.

In the tombs of Southern Italy many vases are found representing the same stage of development as those of the Crimea and Cyrenaica, varying from large kraters with fine if florid designs, often enhanced by a lavish use of white pigment, to inferior and almost worthless specimens. Inasmuch as these vases are not distinguished by any stylising tendencies such as enable us to classify the other fabrics of Southern Italy and assign them to particular districts, and on the other hand bear the same relation to the later R.F. vases of Athens as do those of the Eastern Mediterranean, it is evident either that all these fabrics were imported from Athens or that Athenian artists had been driven to settle in these respective regions. And since it is exceedingly unlikely that the exportation of pottery from Athens can have gone on to any extent in the fourth century, it seems, on the whole, most probable that the latter is the true version.

We may, then, establish a class of vases intermediate between the R.F. fabrics proper and the local Italian fabrics, which represents the manner in which Athenian artists carried on their traditions under new circumstances, and serves to explain how the new Italian schools came into being.[2]

These vases are often characterised by a refinement of drawing and simplicity of conception which recall the earlier R.F. period, and in such cases accessory colours, elaborate draperies, and the filling-in of the field with miscellaneous objects are studiously avoided. Even the decorative patterns

[1] *E.g.* B.M. F 4-7, 23, 27-9.

[2] See on this group of vases some very illuminating remarks by Furtwaengler in his *Meisterwerke*, p. 149.

show considerable restraint. It is probable that some of these belong to the latter part of the fifth century, even if they are not actually imported from Athens. But there are others of a distinctly florid kind, in which we may trace the influence of Meidias and his school. The compositions are crowded with figures, often placed at different levels (without indication of ground-lines), and there is a general tendency to elaborate decoration, both by means of white pigment and by richly embroidered draperies. As examples may be cited two fine kraters in the British Museum, one with a scene from the lesser Mysteries at Agra (F 68), another with Thetis and the Nereids bearing the arms of Achilles (F 69). The bell-shaped krater is by far the most favourite form, although practically a new one in Greek ceramics; contrary to the usual rule, the reverse often has a definite subject, in which accessories are used, although the tendency had begun some time before the end of the fifth century to neglect the decoration of the reverse in kraters and other large vases.

In its new home in Southern Italy this branch of Greek art had lighted on a very favourable soil. The great colonies such as Tarentum, Capua, Cumae, and Poseidonia, founded almost in the dawn of Greek history, were not only as completely Hellenic as Athens and Corinth, but in luxury and splendour even surpassed them at this period. Hence, art flourished in such towns far more readily than in the distant and comparatively barbarous regions of South Russia and North Africa. In the character of their productions we shall see the nature and condition of the inhabitants of Southern Italy reflected. The chief aim is splendour and general effect; and both the size and colouring of the vases indicate to some extent the luxury and magnificence in which the people lived.

It must not, however, be supposed that vase-painting was a new art introduced to this region by Athenians in the earlier part of the fourth century. In another chapter we shall speak of the early attempts at imitation of Greek vases on the part of the semi-barbarian natives of the peninsula, and reminiscences of these early attempts crop up from time to time under circumstances of greater development, as will be seen.

Moreover, a constant stream of importations from Athens (small indeed as compared with that to Etruria, but still steady) had been finding its way to the Greek colonies of Southern Italy and Sicily; special fabrics were made for export to Nola, Gela, and other places; and thus the local artists had all along been undergoing an unconscious training which enabled them to take up the industry at the point where the Athenian artists left off.[1]

The local fabrics of Southern Italy fall into three main classes, corresponding to the geographical divisions of Apulia, Lucania, and Campania, which three, with some modifications, include all that come under discussion in the present section. Before, however, entering upon the question of the criteria on which this classification is based, a few general considerations may be touched upon by way of preface.

The study of South Italy fabrics is to some extent a new one. At the beginning of the last century, when scarcely any vases had been found outside Italy, the majority of both public and private collections consisted of vases of this period. Of those now exhibited in the Fourth Vase Room of the British Museum, at least one-fifth are from the collections of Sir William Hamilton, Charles Towneley, and Richard Payne Knight; and in such publications as those of D'Hancarville, Tischbein, Inghirami, and Millin, a great majority of the plates are devoted to them. Hence their importance was much over-estimated; but, on the other hand, no attention was paid to questions of style or provenance, and they were only regarded as pretty pictures. Subsequently to the discoveries at Vulci, and the gradual growth of the scientific study of vase-painting, the later vases suffered greatly from neglect, as yielding less interest than the early fabrics and the products of the best Athenian artists, and even at the present day it is rare to find them made the subject of serious study. The only writer, in fact, who has attempted in recent years to apply to them the critical methods of modern archaeology is Signor G. Patroni of the Naples Museum, who has availed himself of the opportunities afforded by the extensive series under his care.[2]

[1] See also what is said below (p. 485) on early Apulian fabrics.

[2] See his *Ceramica Antica, passim.*

The vases from Southern Italy, which from their style may be regarded as undoubtedly local non-Attic fabrics, are all distinguished by certain common features. In all there is seen a perpetual striving after effect rather than beauty, manifested in the size and splendid appearance of the earlier Apulian products, in the largeness of style and bold drawing of Lucanian artists, especially the school of Paestum, and in the gaudy colouring of the Campanian vases. The later Apulian wares are chiefly remarkable for varied and exaggerated shapes.

Common to all vases alike is the fondness for ornamental patterns, such as the egg-pattern, wave-pattern, maeander, palmettes, and wreaths of laurel, myrtle, or ivy; though even these are guided by certain rules, much as on the black-figured vases. On the large bell-shaped kraters the decoration almost invariably consists of a laurel-wreath round the lip, maeander below the designs, and palmette patterns under the handles; and every shape of vase has its characteristic decoration. The Campanian vases show the least tendency to formal ornament, and the Lucanian run to the opposite extreme. The column-handled kraters are almost alone in retaining the archaic scheme of decoration in panels with borders of ornament, to which they adhere throughout the R.F. period; but the panels are occasionally employed for hydriae or oinochoae. In most cases, however, the luxuriant palmette patterns under the handles form an adequate frame for the design with the maeander band below. A female head frequently occurs as a decorative motive, especially in the Apulian vases; either forming the main decoration, or placed under the handles, or adorning the neck, encircled with foliage. So too the figure of Eros is employed on the later Apulian vases purely as a decorative motive.

The shapes of the vases present a very great variety, as compared with the Athenian fabrics.[1] The bell-shaped krater enjoyed a short vogue, and is only found in the earlier examples; but besides the column-handled type already mentioned, the calyx-krater (*vaso a calice*) and the volute-handled (*a rotelle*) form occur from time to time. Among the early Apulian vases

[1] See generally Chapter IV., p. 162 ff.

a variety of the latter, with medallions (*mascherone*) in place of the volutes, frequently occurs; these are often of gigantic size, decorated with several rows of figures, and nearly all the finest existing specimens are of this form. It is also the usual type for the sepulchral vases (see below). The medallions are ornamented with Gorgons' masks and other devices, coloured on a white slip. A peculiar local variety of the krater, with four handles, is found in Lucania only (see p. 172).

Other vases for holding liquids are the situla, lebes, amphora, and hydria, forms which are more or less familiar. The amphora is slender, with more or less elliptical body; in Campania it is small and squat-shouldered, the body almost cylindrical, but in Apulia it is usually very tall and elegant (cf. Plate XLV.). An occasional variant has a cylindrical flat-topped body, with elaborate handles in the form of scrolls; the so-called *pelike* is a more common type, but somewhat inelegant. The hydria is usually a degenerate version of the R.F. *kalpis*, but at Paestum the Attic type still obtains. A new form is that known as the *lekane*, a jar for holding sweetmeats; it has vertical handles and a cover of elaborate form, often surmounted by a small vase. Of similar type is the so-called *lepaste*, a circular covered dish on a high stem.

Among the smaller vases may be mentioned the oinochoë, of which there are one or two varieties, notably the graceful *prochoos*, with its high handle and foot, and the equally ungraceful *epichysis*, with its long beak-like mouth and pyxis-shaped body; both of these are confined to Apulia. The lekythos retains the bulbous body and low foot of the later R.F. period; the askos in various forms is fairly common. Two new varieties are a sort of alabastron without a handle but with flat base, and a jar with a handle over the mouth. Of drinking-cups the kantharos and rhyton are popular among the later Apulian wares; the kotyle is rare, and the kylix has almost entirely disappeared, its place being taken by a gigantic circular dish, elaborately decorated inside and out. These are obviously designed with a view to general effect, and seem to have been intended for hanging up against a wall.

In regard to the technique the general method is that of

the later R.F. vases; but in the majority all idea of simplicity and refinement is lost, and the tendency to exaggeration and showiness is manifested both in drawing and colouring. Throughout there is a fondness for large masses of white, and this pigment is used not only for the flesh of women and of Eros, but for architectural details and other objects, such as temples, shrines, and lavers. Yellow is largely employed for details, especially for features or hair, and for picking out the ornamental patterns; purple, too, is not uncommon. Attempts at shading are occasionally found.[1] Accessory colours are, however, seldom found on the reverses of the vases, which are always drawn and painted with the greatest carelessness.

The drawing is entirely free, and in fact errs on the other side, becoming careless and faulty; the forms are soft, and the male figures often effeminate. An extreme facility of hand has indeed proved the ruin of the vase-painter. The love of the far-fetched betrays itself in variety of posture and elaborate foreshortening; and in the richly embroidered draperies and studied settings of some scenes the influence of the theatre is obviously to be traced. Frequent attempts are made at perspective, especially in buildings of which the insides are shown, but the attempts are seldom successful. As a rule the artist is content to indicate figures in the background by placing them on a higher level, or only showing the upper half of the figure. On many vases with mythological subjects, especially those of Apulia, a row of deities is thus represented, as if seated on the *θεολογεῖον* of the stage. Landscape is represented by rocks, stones, and flowers scattered about, trees and buildings; but in most cases the painter prefers the old system of merely giving a clue to the scene, representing the palaestra by jumping-weights or oil-flasks suspended, women's apartments by sashes, toilet-boxes, or small windows, and so on.

The pictorial effect of the scenes on many vases naturally gives rise to the question to what extent the artists were indebted to the great painters of the fifth and fourth centuries. In some cases the paintings seem to be more naturally adapted for large canvases than for the limited surface of a vase; but

[1] Cf. B.M. F 193, F 210, F 542.

more than this, in others the subjects actually lead our thoughts directly back to the works of great masters of which we have record. The influence of Polygnotos and his school has indeed died out, but the emotional tendencies of the fourth-century painters and their fondness for new and difficult subjects found a ready echo in the conceptions of the Apulian vase-painters. It may suffice to quote a few instances from the British Museum collection. Thus on one vase (F 479) we find a representation of the infant Herakles strangling the snakes, a theme selected by the great Zeuxis, and also to be seen in one of the paintings from the house of the Vettii at Pompeii. Or, again, the famous sacrifice of Iphigeneia and the death of Hippolytos, subjects which employed the brushes of Timanthes and Antiphilos respectively, are depicted in a truly pictorial manner on two kraters (F 160, F 279). In each case we are able to note a correspondence with the description of the pictures given by Pliny; in the last-named, also, with a picture described by Philostratos. Were more known of ancient pictures, it is possible that other examples would be readily found; but that some such influence was exerted can hardly be questioned.

Again, in the later vases with opaque designs on black grounds (see p. 488), most of which are merely decorated with wreaths, festoons, or masks, we are at once reminded of the Pompeian wall-paintings, or rather of their predecessors in the Hellenistic Age, since the vases must be earlier than most of the pictures of Pompeii. There is a vase of late date in the British Museum (F 542) which, with its elaborate treatment of light and shade effects and its border of arabesques, not only in its subject (a young shepherd and his dog), but also in method, suggests a close connection with the Pompeian frescoes.[1]

Another influence at work on the vases of the period besides that of the great painters was that of the stage, in which both tragedy and comedy play their part. The influence of tragedy as represented on the Greek stage is seen not only in the choice of subjects, but in the composition of the scenes and the costumes of the figures. This is especially the case with the

[1] See also below, p. 485.

large Apulian vases with mythological subjects. The architectural arrangements, with a temple, altar, or statue in the centre, the embroidered draperies and gorgeous tiaras worn by the principal personages, and the abundance of dramatic or even passionate action, can only be due to the influence of the stage. But it is only to Euripides that we can ascribe this influence. There appears to have been a great revival of his plays towards the end of the fourth century, especially in Magna Graecia, and the extent of the effect of this revival on the vase-paintings has been discussed by several writers. The tendency of the age to passion and pathos, seen in the Pergamene sculptures and other great works of art, as well as in the paintings of a Parrhasios or a Timanthes, would naturally find an echo in the subjects treated of by Euripides. Of the existing dramas, we find scenes drawn more or less directly from the *Hecuba*, the *Hercules Furens*, the *Hippolytos*, the two *Iphigeneias*, the *Medeia*, and the *Phoenissae*. Many others can be traced to the lost dramas, as for instance (to quote only from examples in the British Museum) the *Alkmena*, the *Oineus*, the *Antigone*, the *Andromeda*, the *Oinomaos*, and the *Lykourgos*.[1]

It has been observed that on many vases of this period on which mythological subjects are represented, although the theme is essentially tragic, yet the treatment has a somewhat grotesque, not to say burlesque effect. A notable instance is the well-known vase of Assteas in Madrid, with Herakles destroying his children (Fig. 107). This quasi-comic element, which appears to be quite unintentional, is often accompanied by considerable largeness of scale, exemplified in the size of the figures, the expression of the features, and the drawing generally. It may be that a certain element of exaggeration attended the revival of tragedy in Southern Italy,[2] caused by unsuccessful attempts to retain the lofty manner and large style of the old productions. Hence too, perhaps, the fondness

[1] The subject has been fully treated by Vogel, *Scenen Eurip. Tragödien*; Huddilston, *Gk. Tragedy in Vase-paintings*; and Engelmann, *Arch. Studien zu den Tragikern*: see also *B.M. Cat. of Vases*, iv. p. 10.

[2] See *J.H.S.* xi. p. 228.

for burlesques of tragedies among the comic writers of the period, reflected in another class of vases.

In the vases with comic subjects it is not necessary to have recourse to the Attic Comedy, New, Middle, or Old, to account for their introduction; an explanation lies nearer at hand. It is true that the costumes worn by the actors are closely related to those of the Old Comedy,[1] and that one or two subjects may possibly be traced to the *Frogs* of Aristophanes (see Chapter XV.). But it is not likely that these plays were ever revived in Southern Italy, as were those of Euripides. They were essentially topical, and their political and social satire would have been lost on a later generation. On the other hand, we know that a kind of farce, known as the φλύαξ, was especially popular with the people of Tarentum and other towns of Southern Italy in the fourth century, either dealing with subjects of daily life or burlesquing mythology and heroic legends. It was during the performance of one of these in the theatre at Tarentum that the spectators saw the Roman fleets entering their harbour in 302 B.C.[2] The best-known writer of *phlyakes* was Rhinthon, whose *Amphitruo* was the original of Plautus' play of that name; a scene from this may be portrayed in a vase in the Museo Gregoriano at Rome.[3] His plays, to judge from the titles, were mainly burlesques; but all literary remains have perished, and we can only form an idea of them from the vases.

In many of these scenes the actual stage is represented; in others we have merely the figure of a comic actor, sometimes in a grotesque attitude. The figures almost invariably wear masks and padded stomachs, their dress consisting of a close-fitting leather garment with sleeves and tight trousers, over which is a short loose tunic (see Fig. 105); on their feet are the traditional *socci* or low shoes of comedy, and there is one instance of an actor wearing gloves. The subjects of these vases have been dealt with elsewhere,[4] and need not be

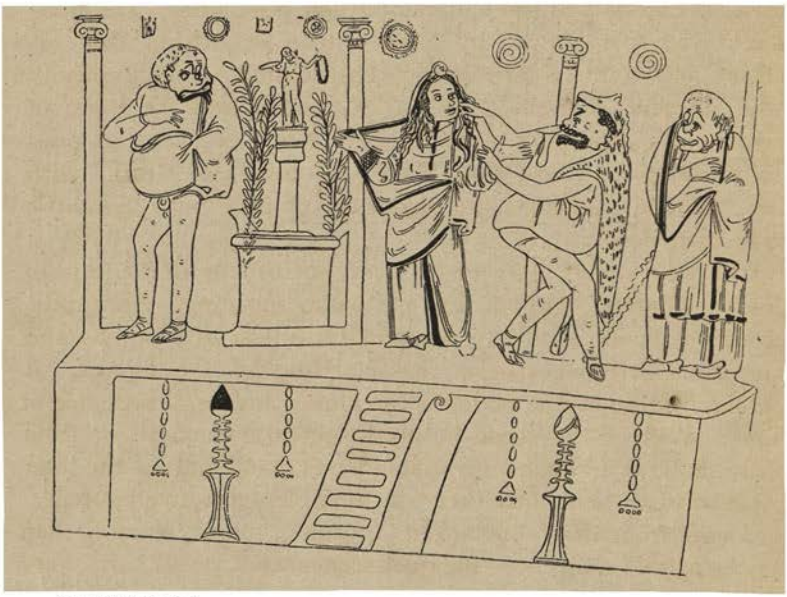
[1] See Körte in *Jahrbuch*, viii. (1893), p. 61 ff.

[2] Dio Cassius, *frag.* 39, *ed.* Bekker.

[3] Helbig, ii. p. 314, No. 121 = Schreiber-Anderson, *Atlas*, pl. 5, fig. 8: see also B.M. F 150.

[4] See Chapter XV. § 3. They are also fully discussed by Heydemann in *Jahrbuch*, i. p. 260 ff.

recapitulated here; the example given in Fig. 105, a burlesque of Herakles and Auge,[1] may serve as typical. They have a peculiar style of their own, and can hardly be classed with any of the known fabrics, though found all over Southern Italy. One is signed by the painter Assteas of Paestum, but we look in vain for evidence of his usual style thereon. They may all be regarded as belonging to the fourth century.



From *Jahrbuch*, i.

FIG. 105. BURLESQUE SCENE: HERAKLES AND AUGE.

Turning to the subjects in general on these vases, we note the systematic supplanting of the old heroic myths by new subjects of a dramatic and emotional nature. As in the case of the gods Zeus and Athena are replaced by Apollo, Aphrodite, and Dionysos, so instead of the labours of Herakles and Theseus we find themes drawn from the stories of Troy and Thebes, or the legends of Pelops, Hippolytos, Pentheus, and Lykourgos. The taking of Troy in particular is a popular subject on the large vases, as are single episodes, such as Ajax seizing

[1] See also Vol. II. Fig. 134.

Kassandra. Among entirely new subjects, introduced from the tragedies, are those relating to Alkmena, Pelops, Oedipus, and the later Theban heroes.

Cosmogonic myths such as the Gigantomachia and the Birth of Athena entirely disappear, as do many of the myths connected with the gods; on the other hand, such subjects as the contest of Apollo and Marsyas, the Judgment of Paris, Triptolemos, or Europa and the bull, retain their popularity. Herakles is conveyed to Olympos by Nike instead of Athena; but his labours and combats are seldom represented. The typically Attic subjects, Theseus, Eos and Kephalos, and the Birth of Erichthonios, disappear as might have been expected, as does the wrestling of Peleus and Thetis. Combats of Greeks with Centaurs and Amazons are favourite subjects, but often little more than decorative.

Dionysiac scenes are very frequent, but usually in the form of groups of figures without any particular meaning; Aphrodite, and even Apollo, similarly occur in the midst of Nymphs and attendants, without special characterising of the figures. A peculiar feature of the period is the almost universal presence of Eros. Whether the scene be mythological, Dionysiac, or from daily life, he is an almost invariable participant, and on the later Apulian vases frequently occurs as a single decorative figure.

Scenes from daily life are, if anything, more common than mythological subjects. Banquet-scenes and revels are very popular, and the kottabos is sometimes introduced (see Chapter XV.). A departing warrior is sometimes represented on Lucanian and Campanian vases (see Fig. 108 and Plate XLIV.), but chariot and battle scenes are comparatively rare. Among the Apulian vases occur a large class of subjects formerly characterised on insufficient grounds as "toilet scenes" of Aphrodite or Helen. Many no doubt actually represent scenes from women's daily life; but the commonest type is that of a seated woman and a standing youth exchanging presents of fruit, mirrors, sashes, or toilet-boxes. The presence of Eros in most cases suggests scenes of courting and the offerings of lovers; but as a rule they are purely fanciful, like the designs on Dresden and Sèvres china.

Athletic scenes, in which a race or contest is going on, are practically non-existent; but groups of athletes, or rather of *ephebi*, usually wrapped in mantles and conversing together, furnish the stock decoration of the reverse of the kraters and other double-sided vases, a practice already begun in the Athenian R.F. vases, and now become invariable.

Two classes of subjects to which allusion has not yet been made, and which are almost confined to the large Apulian vases, have an important bearing on the purpose for which these vases were made—namely, for use at funerals. The first class includes scenes from the under-world, and in this series are some of the most magnificent of existing vases (see Plate LII.). The subjects and the manner of their representation have been fully discussed elsewhere (Chapter XIII.); they are treated in the same theatrical style as the mythological scenes already discussed.

The second class is confined to scenes representing offerings at the tombs of the departed, which may take two forms. In the simpler, which is characteristic of Lucania and Campania, and especially of the hydria form, the tomb is a stele, like those of the Athenian lekythi, at which the relatives of the deceased meet to mourn or make offerings (Fig. 20). The "type" is that of Orestes and Electra at the tomb of Agamemnon, but only in one or two cases is it possible to suggest this interpretation. On the Apulian vases, almost exclusively on the large kraters and amphorae, but sometimes also on the hydriae, a more elaborate treatment of the subject is employed. The centre of the scene is occupied by an Ionic distyle building representing a ἡρῷον or shrine devoted to the worship of an ancestor or family "hero." In the entrance of this building (which is painted white to denote marble) stands or sits the figure of a young man or a woman holding some attribute—a cup or piece of armour—or standing by a horse. These figures are usually painted white throughout like the building, which seems to imply that a statue or relief is represented rather than an actual human figure.[1] On either side of the shrine figures are represented bringing libations. Sometimes

[1] Cf. a tomb with paintings at Tritaea in Achaia described by Pausanias, vii. 22, 4.

the actual tomb of the deceased is represented with a plant growing in it; or, again, a lady is represented at her toilet with her maid, as in the Athenian sepulchral reliefs (Fig. 106). Each person is represented with his appropriate costume or attributes—the warrior with horse or armour, the hunter with dog, the lady with articles of toilet.

In spite of the absence of "banquet" or "greeting" scenes, the parallelism with the Attic reliefs is very marked, and the sepulchral character of these vases is indubitable. It is, further,

FIG. 106. APULIAN VASE WITH SEPULCHRAL SCENE (BRITISH MUSEUM).

natural to suppose that there is some reference to the worship of a ἥρως or deceased ancestor, such as is known to have been a universal custom among the Greeks.[1] Reliefs have been found at Tarentum with subjects which obviously have this reference. Apart from these two classes, however, the majority of the vases of Southern Italy seem to have been made originally for ornamental purposes, such as the decoration of a house, as is implied by the distinction in the artistic merit of the two sides.

[1] Cf. Roscher, *Lexikon*, i. p. 2441 ff. (*s.v.* Heros); *J.H.S.* v. p. 105 ff.; *Brit. Mus. Cat. of Sculpt.* i. p. 293 ff.; Furtwaengler, *Coll. Sabouroff*, i. p. 17 ff.

Artists' signatures in this period are exceedingly rare; only three, in fact, are known. Of these one may be briefly dismissed—Lasimos,[1] who signed a fine Apulian vase in the Louvre, with sepulchral and other scenes; his style is hardly distinctive enough to admit of identifying any others as his work. But in the other two names, those of **Assteas** and **Python**, we find more interest. Five vases exist with the signature of Assteas, and one with that of Python, and it is interesting to note that they both use the form ἔγραφε (see Chapter XVII.). The list is as follows:

ASSTEAS. (1) Krater from Paestum in Madrid. Reinach, i. 168 = Baumeister, i. p. 665, fig. 732 = Fig. 107. Herakles destroying his children.

(2) Krater from Paestum in Naples (3412). *Wiener Vorl.* B. 2. Phrixos and Helle.

(3) Krater from S. Agata dei Goti in Naples (3226). Millingen, *Anc. Uned. Mon.* i. 27. Kadmos slaying the dragon.

(4) Krater from S. Agata dei Goti in Berlin (3044). *Wiener Vorl.* B. 3, 1. Scene from farce (parody of Prokrustes?).

(5) Lekythos from Paestum in Naples (2879). Millin-Reinach, i. pl. 3. The garden of the Hesperides.

PYTHON. Krater from S. Agata dei Goti in the British Museum (F149). *J.H.S.* xi. pl. 6. Alkmena on the funeral pyre.

The characteristics of Assteas' work are very marked, and, curiously enough, Python's differs little from it. Both are essentially pictorial artists, trained in Greek traditions, and inheriting from Attic painters like Meidias the love of elaborate and minutely rendered draperies and picturesque grouping of figures at different levels. In the latter detail we also seem to see signs of the influence of Polygnotos.

There are many other vases in our museums which present the same features of style and treatment as these.[2] Besides

[1] Possibly a mistake for, or variation of, the name Dasimos, which occurs on a fourth-century bronze votive helmet from Southern Italy in the British Museum (*Cat.* 317).

[2] *E.g.* B.M. F150-6; Naples 1778, 1779, 1782, 1787, 3248; and others given by Patroni, *Ceramica Antica*, p. 77. A vase published by Inghirami (*Vasi Fitt.* 1-3) is thought by Engelmann to be the work of Python (*Ann. dell' Inst.* 1874, p. 35). But this hardly seems likely. The B.M. vase F155 is much more after his style.

those already mentioned, the fondness for half-figures in the background, the large heads, pronounced features, and heavy masses of hair in the figures on these vases connect them unmistakably with the school represented by the two artists. It is not the style of Lucania or of Campania, still less that of Apulia; and yet it is clearly an Italian fabric. Some previous writers have maintained that Assteas came from (or was resident at) Tarentum, arguing thus partly on epigraphical grounds, partly on the ground of his employment of scenes from the farces,[1] which, as we have seen, were popular in that city. But having regard to the fact that three out of five of Assteas' vases were found at Paestum, and that he combines certain characteristics of Lucanian and Campanian fabrics, we may fairly assume that he (and therefore also Python) resided in that city, which lay on the border of the two districts.

We are thus enabled to establish a **style of Paestum** distinct from the other Italian fabrics—a conclusion at which the present writer and Signor Patroni arrived independently some years back. The latter has pointed out that several small details also point to that city—such as the gaily plumed helmet worn by Herakles on the Madrid vase, which resembles those worn by local warriors on paintings found in that city.[2] And in the Naples Museum there are several other vases in the style of Assteas from Paestum.[3] Signor Patroni dates Assteas about 350—320 B.C., Python a little later.

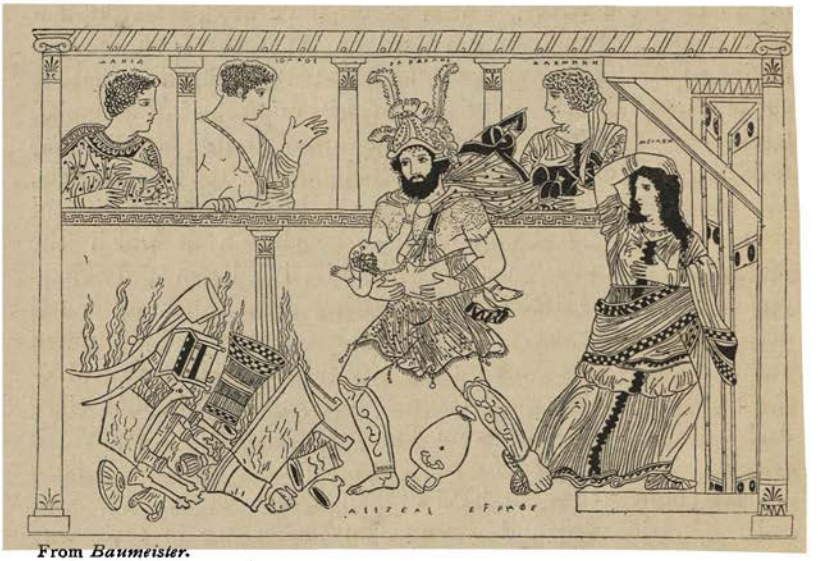
The Madrid vase and the Python krater are in their way masterpieces, and form almost the finest examples we possess of South Italian vase-painting. Both are extraordinarily rich in colouring as well as in detail. The former (Fig. 107) represents, as has been said, Herakles destroying his children the subject being treated in a manner which to us appears almost grotesque, not to say comic. But it is probable that this is due partly to the element of exaggeration which has been ascribed to the revival of tragedy (see p. 472). The whole conception

[1] Two of these vases in the British Museum (F 150-51) are in the style of Assteas. Furtwaengler assigns all, including that signed by A., to Campania. It is, however, more likely that they were mostly made at Paestum. The one in Rome with Zeus and Alkmena (see p. 473) may be by Python.

[2] *Mon. dell' Inst.* viii. pl. 21.

[3] See note above and Patroni, p. 71.

is obviously theatrical, with the setting of Herakles and his child, the principal figures, against a background formed, after theatrical models, by the front of the palace, through openings in which appear the horrified faces of Alkmena and Iolaos, and that of Mania, the goddess of madness. Herakles has already set fire to a confused pile of household furniture—tables, chairs, and wool-baskets—and a child clings to him in agony, while Megara tears her dishevelled hair; but their pleadings have no effect. In the Python krater the action is less



From *Baumeister*.

FIG. 107. VASE BY ASSTEAS IN MADRID: HERAKLES DESTROYING HIS CHILDREN.

violent and theatrical, but there is the same gaudiness of colouring and richness of embroidered costume. Alkmena is seated on the pyre, to which Amphitryon and Antenor are about to set light, and raises her hand in supplication to Zeus, whose bust is seen above. In answer to her prayer the Hyades or rain-nymphs pour down water from their pitchers to extinguish the flames. It should be noted that in this painting we have several successive stages of time combined in one (cf. Vol. II. p. 10); the pyre is not yet lighted, but the water is already descending to extinguish it.

We now proceed to describe in detail the characteristics of the three principal fabrics, beginning with that of **Lucania,** as the earliest in character, if not necessarily in point of time. Lucanian vases stand nearer to the latest Attic fabrics than do those of the other districts, and do not present the same local peculiarities; nor do they sink like the others into a state of decadence and barbarism, but are very conservative in their style.

We note in them a much greater unity of style than in the vases of Campania, and everything points to one centre of fabrication. This is most probably Anzi, where the largest number have been found. Information as to provenance is unfortunately often vague, but few other places are given as sources (see p. 83), almost the only other names being those of Pisticci and Pomarico. But the number of vases that it is possible to attribute to Lucania is not large in any case.

The designs are usually somewhat severe and restrained, and characterised by a certain stiffness of drawing and largeness of scale. The heads of figures are abnormally large, with great staring eyes and masses of hair rendered without detail. The draperies are comparatively free from ornamentation, only broad black borders and patterns of small dots being admitted. The clay is of a rich red colour, but accessory colours are exceedingly rare. Hence they present a great contrast to the Apulian and Campanian, with their masses of white and generally gaudy appearance. Another peculiarity is that fillets in the hair are rendered simply by leaving a narrow band across the head in the colour of the clay. The figures often stand in the air without the usual dotted ground-lines, but sometimes the ground is represented by a heap of loose stones. A favourite device is that of a half-shield seen in the upper part of the scene, as a sort of indication of locality or action.[1] Fig. 108 gives a typical example of Lucanian vase-painting.

Among the favourite shapes are the bell-shaped krater and the amphora, also the hydria and column-handled krater. The hydria is generally employed, as in Campania, for sepulchral subjects. The vases are mostly of large size, whence a corre-

[1] *E.g.* B.M. B 159, 160, 174.

sponding largeness of the figures; whereas Campanian vases are generally small, and make up for the absence of imposing figures by their colouring. An entirely new shape, peculiar to this style, is the four-handled krater, to which the name of *nestoris* has been somewhat absurdly given[1]; it is undoubtedly a local form, being found in the indigenous pottery of the district.[2] There are two varieties, one with a high neck, the other with sloping shoulder and no neck. The handles are usually ornamented with discs painted with rosettes, and the designs are in panels surrounded by orna-

FIG. 108. DEPARTURE OF WARRIOR, FROM A LUCANIAN KRATER (BRITISH MUSEUM).

ment, sometimes on the second variety with a lower frieze of figures. Generally speaking, secondary ornamentation is largely employed on these vases, especially on the last-named shape. The palmette patterns under the handles are usually very luxuriant.

The vases of **Campania** present in many ways a striking contrast to those of Lucania. Their chief characteristic is, as has been noted, love of picturesque effect and variety of colour, even to the extent of introducing attempts at shading (see above,

[1] See above, p. 172.

[2] See Patroni, *op. cit.* p. 25, and Chapter XVIII. It appears in the vase-painting given in Fig. 108.

p. 471).] The vases are mostly small, and none of the large kraters or amphorae belong to this class. The favourite shapes are the hydria, lekythos with bulbous body, and amphora; the latter is clearly an imitation of the Attic "Nolan" amphorae, which were so largely imported into the district, but the body is usually more symmetrical. The clay is usually of a buff or dull yellow ochre tone, and red and yellow washes are frequently used, as well as large masses of white; these tints are laid on very carelessly, and the white is of a kind that is apt to flake off and disappear. Yellow, purple, and white are largely used as accessories, and the drawing has a tendency to become very careless. The lines of the ground are indicated by occasional strokes of white, or by rocks strewn with flowers. Ornamental patterns are not so popular as in Lucania; the favourite is the wave, and the palmettes under the handles are thick and ugly, with angular leaves. Some decorative motives seem to be derived directly from nature.

The subjects are often interesting and uncommon, introducing recondite or unusual myths; many of the vases with comic scenes appear to belong to this class, and one in the British Museum has an Oscan inscription. Local peculiarities of costume and armour, which Signor Patroni calls Osco-Samnite, are often found; for instance, warriors wear a very short chiton with broad girdle, a helmet with waving crest and tall side-plumes of Italian type,[1] and a remarkable breast-plate formed of three circular plates of metal arranged in a triangle.[2] These same peculiarities are found on the wall-paintings at Paestum, and there are indications that Virgil was familiar with them.[3]

Signor Patroni, by dint of an exhaustive study of the Naples collection, has made a tentative classification of Campanian vases according to fabric; he distinguishes those of Cumae, Saticula (Santa Agata dei Goti), and Abella; but those of Capua, Nola, and Neapolis appear to have no distinctive style. The Cumae fabric, for studying which the *Raccolta Cumana* in Naples gives

[1] Cf. that worn by Herakles on the Assteas vase, Fig. 107.

[2] See Plate XLIV. and *B.M. Cat. of Bronzes*, No. 2845.

[3] *Mon. dell' Inst.* viii. pl. 21 and *Annali*, 1865, p. 262 ff.: cf. Virg. *Aen.* vii. 785; ix. 365. See also *B.M. Cat. of Vases*, p. 20.

exceptional facilities, is represented by the long, straight-bodied amphorae, the hydriae with female heads under the handles, and kraters on which the design is framed by stylised floral patterns or heavy palmettes. Among the characteristic patterns are the wave, large flowers in profile, and ground-ornaments generally, such as ivy-leaves, branches, and small windows. The strong tendency to polychromy seems to be the result of using the late Attic polychrome vases as models. In the colouring a new feature is the use of a carmine red, which, according to Patroni, is only found in the Cumae fabrics.[1] Mythological subjects are rare,[2] sepulchral common, and shrines are found on these alone; but the majority have scenes from daily life,[3] banquets, return of warriors, etc. It is on these that the local costumes are usually found.

The Saticula fabrics are very uniform,[4] practically all bell-shaped kraters with red clay; colours are sparingly used, and then only white; a maeander takes the place of the wave-pattern as a border; ground-lines are usually indicated. Of subjects Dionysiac have the preference. The vases of Abella are of late date, chiefly hydriae of very pale clay with accessory colours; among the typical patterns are arabesques ending in white daisies. They sometimes show reminiscences of the Paestum style.[5]

There are a few peculiar fabrics which we may also attribute to a Campanian origin, including rude imitations of the B.F. style, chiefly small amphorae with single figures; imitations of Nolan amphorae, reproducing both their form and their scheme of decoration[6]; and bell-shaped kraters imitating the Attic style, which Signor Patroni has associated with Saticula. The imitations of Nolan amphorae have a slim body, twisted handles, and a sharply set-off shoulder forming a right angle with the neck instead of a graceful curve. As in their prototypes, the subjects are confined to one or two figures each side. The lustrous black

[1] Naples 856; B.M. F 213 (?).

[2] Naples 2293 and R.C. 141 = Reinach, i. 387; Berlin 3023.

[3] B.M. F 191 ff.; Naples 871, 2855, 3368.

[4] Patroni thinks that such vases as Jatta 1498 (= Reinach, i. 110, 4) have formed the model for these Saticula vases.

[5] *E.g.* Naples 2852.

[6] *E.g.* B.M. F 143-148; Naples 3093, 3129: see *Arch. Anzeiger*, 1893, p. 93.

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SOUTH ITALIAN VASES (BRITISH MUSEUM).

1, 2, APULIAN VASES; 3, CAMPANIAN.

glaze of the Attic vases is admirably reproduced. There is also a class of vases with designs painted in opaque red on the black ground, reproducing the method of the transitional vases described on p. 393.[1] They are very rude in character, with roughly incised details and subjects of a simple kind; the red pigment appears to have been made from fragments of pounded pottery (*testa trita*). There is, however, one remarkable exception—a small phiale in the British Museum,[2] dating from the third century, with the subject of a shepherd-boy with his dog. The design is carefully painted in opaque red and white in the style of the Pompeian wall-paintings, and the effect of light and shade produced by hatched lines is both remarkable and unique. A krater found at Civita Castellana (Falerii),[3] the paintings on which are in Campanian style, is unique in having Latin inscriptions over the figures, a group consisting of Zeus (. . . SPATER, *Die]spater*), Ganymede, Eros (CVPIDO), and Athena (MENERVA). The subject is conceived rather in the style of the Etruscan mirrors than that of the painted vases, and is obviously under local influence. As Falerii was destroyed in 243 B.C., a *terminus ante quem* may be obtained for the date of the vase, as for others found on this site (see p. 75).

The vases of **Apulia** are not only more numerous, but of more merit and greater interest than those of the other two classes. In them may be observed two or three stages of development, beginning with a fifth- or early fourth-century group of Attic type, consisting of large amphorae with two friezes of figures.[4] Both in shape and method of decoration these form the prototype of the large kraters and amphorae which comprise the second class; they are distinguished from the latter by severity of treatment and absence of colour. The second class includes the large vases with mythological and tragic subjects, the Under-world vases, and those with sepulchral scenes; they are all richly decorated from head to foot, with two main rows of figures, smaller subjects on the neck, and

[1] *B.M. Cat. of Vases*, iv., F 523 ff.

[2] F 542: see above, p. 471.

[3] *Röm. Mitth.* 1887, pl. 10, p. 231.

[4] *E.g.* Reinach, i. 448 = *Arch. Zeit.* 1883, pl. 7; Dubois Maisonneuve, *Introd.* pl. 69; Naples 3241 = Reinach, i. 384, 1-3; Nap'es 2416, 2418, 2894, 2918, 3247; see Patroni, *Ceram. Antica*, p. 33, and Furtwaengler, *Meisterwerke*, p. 149.

ornamentation over every available space. The theatrical characteristics of which we have spoken above (p. 472) are best illustrated by some of this series.

The third class includes some large vases, such as the so-called *pelikae* and the large phialae, and the smaller forms, the oinochoë and its varieties, and kanthari, rhyta, and other kinds of drinking-cups. Some shapes are peculiar to this class. In spite of the great variety of shape, there is a remarkable poverty of conception in the subjects, which show a tendency to become purely decorative, and are mainly confined to the vague "courting" scenes or "toilet" scenes, or to single figures of Eros and Nike. On the smallest vases the commonest subject is often that of a female head covered with a cap, sometimes of a relatively colossal size, and this also occurs, surrounded by foliage, on the necks of the large vases. The shapes, as in the case of the *epichysis* (p. 179), often tend to ugliness and over-refinement.

The conception of Eros on the later Apulian vases is one of their chief characteristics (cf. Plate XLIV.). An almost invariable participant in every scene, his form assumes an androgynous character; his hair is arranged in feminine fashion, and his person adorned with necklaces, earrings, and other jewellery. Among other peculiarities we may note the double line of white or yellow dots for ground-lines; the characterising of Oriental figures by tiaras and cross-belts; the general treatment of the hair of women, at first long, thick, and wig-like, but later gathered up in a cap, from which the ends float out behind; the thick but effeminate proportions of the men; and the small heads of the horses.

There does not seem to be any possibility of distinguishing different centres of fabric in Apulia. Nor can Tarentum have been a centre of vase-fabrics, although Lenormant stoutly upheld its claims, as the chief centre of Greek civilisation in that region. But Tarentum has been the scene of much excavation, and results do not point to that conclusion; most of the vases found there are purely Greek. On the other hand, enormous numbers have been found at Ruvo, and this was undoubtedly the chief centre, though without a distinguishing style of its own. Ruvo

To face page 486.

APULIAN AMPHORA.

PERSEPHONE IN HADES.

(BRITISH MUSEUM).

was famous for its red clay, and remains of furnaces and potteries have been found there. Other sites where vases have been found are Bari, Canosa, and Ceglie. At Canosa there was a preference for the tall amphora with scroll-handles, the large phiale, and the prochoös,[1] and purple accessories were largely used here. It is also interesting to recall that Canosa seems to have been the centre for the large ornamental vases of terracotta painted in *tempera* (p. 119).

On some of the column-handled kraters[2] local costumes appear, probably representing the Peucetians, and having some affinities with those of Lucania; the principal features are the tall pointed cap and short striped chiton worn by both sexes. Another group peculiar to Apulia is formed by the fish-plates[3]—a peculiar form of plate, with low stem, a sinking in the centre, and edge turned over, all being painted with fish of various kinds (Plate XLIV.). They were no doubt used for eating fish, the sinking being for the sauce; but they may also have been hung up as votive offerings in the temple of some marine deity.

The last efforts of vase-painting on the soil of Magna Graecia date from the latter half of the third century B.C. By this time vase-painting had reached a stage of complete decadence, devoid of style or taste, and rapidly verging on barbarism, as shown in some specimens, which seem to be the efforts of local craftsmen to copy the better examples, but with the same want of success as the Etruscans.[4]

Another direction which vase-painting took before it finally disappeared is illustrated by a group of vases mostly found at Egnazia (Gnathia) in Apulia, which clearly form a final stage in the evolution of the local fabric just discussed. Originally

[1] *E.g.* B.M. F 237, 238 (wrongly attributed to Campania in Catalogue).

[2] See B.M. F 297, 301, and *Ann. dell' Inst.* 1852, pls. M, N, P, p. 316 ff.

[3] B.M. F 254-68; Berlin 3607-19; Naples 2542-61; Petersburg 1693-1710. Cf. *Notizie degli Scavi*, 1894, p. 107, and *Ath. Mitth.* 1901, pl. 2 (an example from the Acropolis at Athens); also a plate inscribed underneath ΙΧΘΥΑΙ (Schöne in *Comm. Phil. in hon. Mommseni*, p. 653). See also p. 194 and Chapter XV.

[4] See Chapter XVIII. For examples of these degenerate vases see *B.M. Cat.* iv. F 490 ff.

known from the place where the majority was found as *vasi di Egnazia* or Gnathia vases, they were in the view of Lenormant more probably made at Tarentum.[1] But we have seen that there is slight evidence of local fabric there,[2] and their connection with the fabrics of Ruvo and Canosa makes it more likely that they came from that neighbourhood. It is therefore probable that the old name is the correct one.

The characteristics of this group are: (1) the black varnish with which the *whole* vase is covered; (2) the designs painted in opaque colours—white, purple, and yellow; (3) the tendency to imitate vases of metal, as seen in the vertically ribbed bodies and other details of form. The important *rôle* played by the black varnish is interesting, as showing the increasing tendency to reduce the painter's labour to a minimum, combined with a striving after novelty and the rejuvenation of the art. The practice, no doubt, arose from the discovery of the painter that it was easier to paint the figures on the black in opaque colour than to trace them out in the clay and work round them with the varnish, especially in the case of the elaborate foliage patterns which played so important a part in Apulian vases.

The subjects are usually confined to the shoulder or neck, at least of the larger vases; but figures are comparatively rare. One krater in the British Museum (F 543) which belongs to the comic series is a notable exception; and there is a pleasing subject on a skyphos in the Louvre[3]—a cock and goose confronted, and greeting one another with the respective salutations, "Ah, the goose!" "Oh, the cock!" But in the majority of cases the only designs are female heads, Erotes (Fig. 118), birds, comic and tragic masks suspended from wreaths, and simple foliage patterns. The reverse of the two-sided vases is often undecorated.

It is interesting to note that specimens of this ware are sometimes found on Greek sites, such as Athens, Myrina in Asia Minor, Melos, and Cyprus. At Curium in the latter

[1] In this he is followed by Rayet and Collignon (p. 328).

[2] Lenormant, however, states that they have been found at Tarentum, as also in the neighbourhood of Lecce and Bari (*Gaz. Arch.* 1881-82, p. 103).

[3] Rayet and Collignon, pl. 13, p. 330.

island a fine hydria in this style, with figures on the shoulder (Fig. 109), was found in 1895.[1] Whether these were imported from Italy or made elsewhere is quite uncertain.[2]

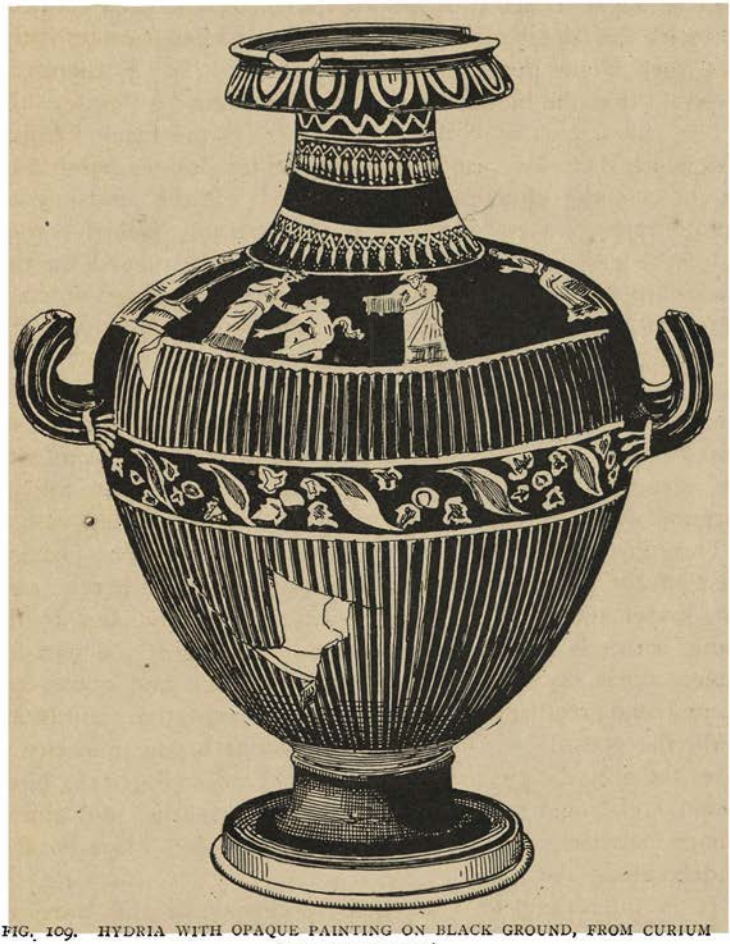

FIG. 109. HYDRIA WITH OPAQUE PAINTING ON BLACK GROUND, FROM CURIUM (BRITISH MUSEUM).

Another interesting but much smaller class which belongs to the latter half of the third century is formed by a group of

[1] *Excavations in Cyprus*, p. 77, fig. 140.

[2] See also B.M. F 553; *Ath. Mitth.* 1901, pls. 3, 4, p. 70 ff.; Pottier, *Louvre Cat.* ii. p. 276.

vases, mostly small phialae, which are distinguished by bearing painted Latin inscriptions.[1] Some also have figures (Eros, a female head, etc.), which are treated in the same manner as the Gnatia vases. It is probable that Rome was the place of origin of this class, in spite of the fact that most of them were found in Etruria.[2] But the Latin language at that time was more at home in Campania than anywhere else outside Rome. The

FIG. 110. PHIALE WITH LATIN INSCRIPTION: "THE CUP OF AEQUITIA" (BRITISH MUSEUM).

inscriptions take the form: AECETIAI POCOLOM, *Aequitiae poculum* (B.M. F 604 = Fig. 110); IVNONENES POCOLOM, *Junonis poculum*; and so on,—Saturn, Mercury, and other Roman deities being included in the list. Reasons have been

[1] See *Ann. dell' Inst.* 1884, p. 5 ff.; Rayet and Collignon, p. 332. Fourteen or fifteen examples are known.

[2] One was found by Lord Savile at Civita Lavinia (Lanuvium) in recent years (*Notizie degli Scavi*, 1895, p. 45). They have also been found on the Esquiline (see *Röm. Mitth.* 1887, p. 233).

given for dating this series in the First Punic War, 260—240 B.C.

Formerly it was universally supposed that the art of vase-painting was brought to an end in 186 B.C. by the action of the Roman Senate when they issued their edict against Bacchanalian ceremonies, which undoubtedly affected Southern Italy. But this was only a natural view to be taken by writers who associated the painted vases with the Eleusinian mysteries and similar ideas; on other grounds it is hardly tenable. Especially in regard to the general putting back of the chronology of the art, it is impossible to suppose that painted vases with mythological subjects were still made in the second century. The character of the mid-third-century vases just described is sufficient to indicate that they represent the last stage to which Greek painting could ever have reached.

§ 3. Figure-Vases and Vases with Reliefs

We propose to conclude this sketch of the history of Greek vase-painting with a few words on a principle which, while always present in Greek pottery, yet at all times lay in the background, until the latest stages of the art, when it entered on a phase of increased popularity. This is the principle of combining the ceramic with the plastic art—in other words, the manufacture of vases in the form of human or animal figures or heads.

It has already been noted, in discussing the primitive pottery of Troy (p. 257), that the idea of associating the vase form and the human form is a very old one. At Troy it is of course seen in its most rudimentary stage, when correct modelling was a thing quite beyond the potter's scope, and he could only roughly indicate features and limbs on the surface of the vase, which thus always remained a vase, and the figure idea never gained, as in later times, the predominance. In the Mycenaean period the advance in modelling was great, but only reached a high level in Crete. It is only since the discoveries at Knossos that we have been able to account for the astounding group of

porcelain *rhyta* from the Enkomi tombs in Cyprus (see Plate X., fig. 4),[1] which at first sight seem to have been made by a sixth-century artist, so admirable and lifelike are they. Although the rams' heads bear the palm, the female heads are, for the period, a *tour de force*, so advanced in type that it would be pardonable to argue—apart from the circumstances of their discovery—that they must belong to a later stage of art.

Apart from these, however, the principle did not find its way into Greece before the seventh century B.C., and then its origin is indubitably Oriental. It is best exemplified by the discoveries in Rhodes, especially at Kameiros,[2] where vases of porcelain and terracotta are found modelled in the form of helmeted heads or heads of animals (see Plate XLVI., fig. 1, and p. 127). The type adopted is that of the aryballos (p. 197); it was no doubt a comparatively easy matter to model its spherical body into the form required, applying paint where necessary to bring out the details as on the vases. In the Western Mediterranean the *alabastron* form seems to have been more popular.[3] It is often adopted for the Canopic vases of Etruria (see Chapter XVIII.). Many of these are unpainted, or rather are covered with a white slip and then painted in *tempera* like the ordinary terracotta figures; they are, in fact, figurines in essence, vases by accident; whereas in the first-named group the vase idea retains the predominance. But it is almost impossible to draw the line. A fine early instance of imitation of metal in early Greek pottery is the British Museum jug from Aegina (A 457) terminating in the head of a Gryphon.

During the sixth century painted figurine vases are rare, though there are not wanting various examples of the class just described, which belong to this period; but at all events hardly any examples can be traced to Athenian manufacture during the age of B.F. vase-painting. Towards the end of the century, however, the fashion was reintroduced by the potter Charinos, who belongs to the transitional period

[1] *Excavations in Cyprus*, pl. 3.

[2] For terracotta examples painted in *tempera* see *B.M. Cat. of Terracottas*, B 281-91; and compare B 286 with an example from Cyprus, Perrot, *Hist. de l'Art*, iii. p. 697. See also Berlin 1292 ff.

[3] See for a terracotta example B 460 in B.M.; also B 203-4 from Rhodes. Cf. Dumont-Pottier, i. chap. xiii.

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GREEK VASES MODELLED IN VARIOUS FORMS (BRITISH MUSEUM).

1, 6, SIXTH CENTURY; 2, 4, 5, FIFTH CENTURY; 3, FOURTH CENTURY.

(about 525—500 B.C.). A vase signed by him, which was found at Corneto, is in the form of a female head surmounted by a *kalathos*.[1] It was made in a mould like the terracotta figures, but the painted decoration, which is remarkably elaborate and minute, is entirely B.F. in character. The patterns on the head-dress include maeander, stars, ivy-leaves, lozenge and net patterns, and a minute frieze of animals, painted in black on the clay ground. A similar vase, but later in date, is in the Berlin Museum[2]; in this example we may note the introduction of R.F. ornamentation, in the palmettes and diapering round the top.

These two stand at the head of a series of similar vases extending throughout the succeeding periods down to the end of the age of painted vases. They compare for style with the heads of the female statues found on the Acropolis, which belong to the same period. Two other potters, Kaliades and Prokles, made similar vases.[3]

The fashion started by Charinos continued throughout the fifth century, but the plastic conception tended to become subordinate to the ceramic, and it became more and more customary to decorate the non-plastic portions in the manner of the vases. Of this development the most noteworthy example is the beautiful rhyton in the British Museum in the form of a Sphinx (E 788), the upper or vase part of which is ornamented with the subject of Kekrops and Erichthonios. The body of the Sphinx is covered with a fine white slip, and the details are picked out with red and gilding. This vase dates from about the middle of the century. There also exist many examples of rhyta or kanthari, formed of a head or two heads back to back, usually a Maenad and a Seilenos.[4] Another favourite type is that of a jug in the form

[1] *Röm. Mitth.* v. (1890), pl. 11, p. 313 ff.

[2] *Cat.* 2190: cf. *Röm. Mitth.* 1890, p. 316.

[3] Klein, *Meistersig.*[2] p. 216; Berlin 2202. A vase in the Louvre with the καλός-name Epilykos is probably by Prokles (see *Monuments Piot*, ix. p. 142).

[4] See Rayet and Collignon, p. 261: for other examples, B.M. E 786, 792, 793; Berlin 4044 = *Coll. Sabouroff*, pl. 69; *Mus. Greg.* ii. 89, 1; and the Kleomenes vase in the Louvre (if genuine). See on this vase *Mon. Grecs*, 1897, pls. 16-7, p. 53; Furtwaengler, *Neuere Falschungen*, p. 21; *Rev. Arch.* xxxvii. (1900), p. 181; *Monuments Piot*, ix. p. 138.

of a negro's or Aethiopian's head[1]; and there are also rhyta which terminate in the head of a lion, mule, or other animal finely modelled (Plate XLVI., figs. 2, 5).

Towards the end of the fifth century there is a reversion to the purely plastic figure-vase, usually in the form of a lekythos with spherical body, to the front of which the figure is attached (Plate XLVI., fig. 4). The vase is usually covered with black glaze, and the figure with a white slip like the terracottas, with polychrome colouring. Examples of this class are the series of lekythi representing Aphrodite Anadyomene in a scallop-shell, of which there are examples at Athens and Petersburg,[2] and the fine vase in the British Museum (E 716) with the bust of Athena Parthenos. A series of smaller lekythi, of which the British Museum possesses examples (G 2-7), represents Eros on a dolphin, the young Dionysos in a sort of canopy, Europa on the bull, a boy with a dog, and other subjects; the technique is similar to that of the larger specimens, with pink and green colouring. They form charming little objects, and are often well executed.[3]

In Southern Italy many of these types are continued, the most popular being that of the rhyton ending in an animal's head (p. 193), of which many examples have been found in Apulia. They usually have some simple design painted on the upper part, such as a figure of Eros. There are also numerous examples of vases in the form of animals or human figures (Plate XLVI., fig. 3), some of which are in black glazed ware with patterns in white like the vases of Egnazia, others being covered with white slip like the terracottas. With the decay of painted decoration the plastic element gradually predominates more and more, until the vase form becomes, so to speak, purely accidental. Thus in the third century the fabrics of Canosa, of which we have spoken in a previous chapter (p. 118), entirely hold the field, and the vases pass out of the sphere of the history of vase-painting.

[1] See Hartwig in Ἐφ. Ἀρχ. 1894, pl. 6, p. 121.

[2] Stephani, *Compte-Rendu*, 1870-71, pl. 1; *Ber. d. sächs. Gesellsch.* 1853, pls. 1-2 (with Eros, dove, and swan): cf. the B.M. terracottas, D 89-91.

[3] See Rayet and Collignon, p. 275, and for other examples Stackelberg, *Gräber der Hell.* pls. 49-52; Treu, *Gr. Thongef.* pl. 1; *Cab. Pourtalès*, pl. 28.

In all or nearly all of the vases just described we observe the same principle at work—namely, the tendency to imitate metal in terracotta. It is one that is constantly recurring throughout the whole history of Greek ceramics, with more or less persistency and prominence. Sometimes, as in the Melian, Proto-Attic, and other fabrics, the imitation is limited to the form of the handles, which is, strictly speaking, inappropriate in terracotta, though frequently found in early bronze vessels.[1] It is seldom found in Ionia, but in Western Greece there are many examples during the seventh and sixth centuries, as in some of the Proto-Corinthian and early Corinthian wares,[2] This is doubtless in a large measure due to the influence of the great centres of metal-work at that time, Corinth and Chalkis. We are not, therefore, surprised to find the tendency exemplified in the pottery fabrics of those two centres, and at Chalkis, as has already been noted (p. 321), it is especially conspicuous in the form and minor details of the vases. At Athens examples are rare, with the exception of the vases of Nikosthenes, who not only copies complete vases in metal, as in his peculiarly-shaped amphorae and in a small *phiale mesomphalos* in the British Museum,[3] but is also addicted to adorning the handles of jugs with female heads in relief, as on specimens in the Louvre and elsewhere.[4] After the sixth century the tendency is far less conspicuous, owing to the high esteem in which vase-painting was then held, and little is seen of attempts at imitating metal until the revival of the plastic element in pottery in the fourth century. An almost unique exception is the Berlin krater from Corinth (2882), which must date from the fifth century. It is of black ware, with designs in relief round the body.[5]

The tendency also manifests itself in a marked degree in

[1] Cf. the Proto-Attic vases, Athens 468 and 657, with the B.M. bronze vase-handles, Nos. 258, 383.

[2] Cf. the Aegina jug mentioned above, B.M. A 1369, and the vase given in Rayet and Collignon, p. 68; also the Tanagra tripod, Berlin No. 1727, and Louvre A 396 from Rhodes.

[3] See B.M. B 295, 296, 382.

[4] Louvre F 116-17; B.M. B 620. See *Arch. Zeit.* 1881, p. 36, and p. 385 above.

[5] Cf. *Coll. Sabouroff*, pl. 74, 3; see also *Ath. Mitth.* 1880, pl. 10; Ἐφ. Ἀρχ. 1885, pl. 9, 11; B.M. G 22-3; Berlin 2704, 2884; Raoul-Rochette, *Mon. Inéd.* pl. 49, 3.

another direction in early Greek art—namely, in that of ornamenting vases with reliefs. So much evidence of this has been yielded by discoveries on Greek soil that it is now certain that this method of decoration had its origin in Greece, and not in Etruria, although the close resemblance between early relief-wares from Rhodes and the large *πίθοι* of Cervetri (see p. 153) had led archaeologists in the past to regard Etruria as its original home. The Etruscans always preferred modelled vases or relief decoration to painted ware, as their *bucchero* fabrics show; but we know that they had no inventive power, and even in this they have proved to be only imitators.[1]

Turning to details of the early Greek vases with reliefs, we may note that there are two varieties: firstly, those in which the reliefs are made by rolling a cylinder round the vase, the design being repeated over again; secondly, those in which the reliefs are made from separate moulds, and attached with some kind of cement.[2] In both classes the shape usually affected is that of a large *πίθος* (cf. p. 151), of a somewhat coarse red clay. It is the first variety which so closely resemble the *πίθοι* found at Cervetri, and which are now known to be the prototypes, not imitations, of the Etruscan examples.[3]

In Greece fragments of the first class have been found on the Acropolis at Athens, the recurring design being a two-horse chariot which a warrior mounts, with a scorpion in the field. The similarity in the clay, the shape, and the technique of the reliefs with the Cervetri vases is remarkable; the subject is one common on Corinthian vases. Other fragments have been found at Tanagra, and there is a good example in the Louvre with a series of figures, representing a dance of women, all of similar types, yet not from the same stamp, but different moulds.[4] The variations of detail in dress and hair show conclusively that the cylinder process is not employed here, but that the figures are freely modelled from a single type.

[1] Cf. *Röm. Mitth.* 1897, p. 253 ff.; *Mon. Grecs*, 1885-88, p. 43 ff.; Rayet and Collignon, p. 341; *Bull. de Corr. Hell.* 1888, p. 491.

[2] Cf. Dumont-Pottier, i. p. 186 ff.

[3] See *Bull. de Corr. Hell.* 1888, p. 491 (Pottier).

[4] *Ibid.* p. 497; also *Mon. Grecs*, 1885-88, pl. 8, p. 44: cf. the Etruscan *bucchero* vases, *e.g.* Pottier, *Louvre Cat.* ii. p. 316 ff.

From Ἐφ. Ἀρχ.

ARCHAIC PITHOS WITH RELIEFS FROM BOEOTIA (ATHENS MUS.).

The costume is that typical of the women on early B.F. vases (cf. p. 372). Some very fine examples of πίθοι with reliefs, dating from the end of the seventh century, have been published by De Ridder.[1] They are all from Boeotia, and are similar to those made in Rhodes, but with the characteristic ornamental handles of metallic form. Here again the figures are freely modelled with variations of detail, and they afford interesting points of comparison with the painted vases and with the early bronze reliefs which are variously attributed to Corinth and Chalkis.[2] One in Athens (*Cat.* 462) has the interesting subject of Artemis Diktynna; another (*Cat.* 466 = Plate XLVII.), an accouchement scene. Similar finds have been made in Kythnos, Tenos, Crete, and Rhodes,[3] the ornamentation being for the most part purely geometrical, but sometimes with Centaurs or human figures.[4] In none of these examples is there any peculiarly Etruscan feature; all is purely Hellenic, presenting close analogies not only with metal-work in relief, but also with the Oriental art to which the Greek work of that age was so much indebted, as in the case of the cylinder process.[5]

A new method of decorating vases, which first makes its appearance towards the end of the fifth century, is by means of *appliqué* reliefs. It is doubtless due to the influence of sculpture, and perhaps more especially to that of the bronze reliefs which on vases and mirror-cases were now becoming popular. The former influence is clearly at work in the great Kertch vase with the contest of Athena and Poseidon (Plate L.), where we may see in the two central figures, which are modelled in relief and applied to the surface of the vase, an undoubted reminiscence of the western Parthenon pediment. There are also vases from Athens, Kertch, the Cyrenaica, and Southern Italy,[6] in which the figures are either partially or wholly modelled in relief, like the vase of Xenophantos or a fine lekythos in the British Museum (G 23) representing the rape of Kassandra by Ajax. Another fine specimen, found at

[1] *Bull. de Corr. Hell.* 1898, pp. 439, 497.

[2] De Ridder, *De ectypis aeneis, passim.*

[3] *Bull. de Corr. Hell.* 1888, p. 500; *Ath. Mitth.* 1886, pl. 4 (Crete).

[4] *E.g.* B.M. A 587, 597 ff.

[5] For a complete list of early vases with reliefs see *Mon. Grecs*, 1885-88, p. 54 ff.

[6] For examples see Rayet and Collignon, p. 266; *Jahrbuch*, 1894, p. 62.

Cumae and now at Petersburg, has a group of Eleusinian deities in relief on the shoulder.[1] Yet another example, recently found at Lampsakos, has the Calydonian boar-hunt as its subject; the figures are in relief on a gilded ground.[2]

The imitation of metal technique[3] is even more marked in the vases of Southern Italy than in those from other parts. At Capua, Cumae, and Metapontum amphorae, hydriae, and oinochoae are found, covered with a very brilliant black varnish, but without any painted decoration; the only ornament is in the form of gilded wreaths and other simple patterns, or designs in relief. The British Museum has a fine series from Capua with garlands of foliage and ornaments in the form of festoons and pendants, the whole forming, as M. Collignon says, "a brilliant and luxurious system of decoration which contrasts with the sober taste of the Attic potters." Some of the hydriae are clearly of local fabric, imitations of the Campanian hydriae of bronze.[4] The forms are often very elaborate, with ornamental handles, ribbed bodies, and moulded stems. An oinochoë has been found with an inscription which gives the names of λεῖα for smooth-surfaced vases, ῥαβδωτά for those ribbed or fluted. Heavy imitations of the gilt and relief wares have often been found at Alexandria,[5] and isolated specimens occur in Attica, Rhodes, and the Cyrenaica.

The growing fashion of using only vases of chased gold and silver in preference to painted pottery made itself more and more felt both in Greece and Italy during the Alexandrine period. The same tendency which we have already noted, to reproduce as far as possible the characteristics and appearance of metal, may be observed in all the pottery of this period. Not only do the subjects moulded in relief reproduce the appearance of the chased and *repoussé* designs, but the shapes are those of the metal vases, and even in the black glaze there are attempts to produce a metallic effect. It is clear that the pottery of this period presents throughout the effect of a

[1] *Cat.* 525 = Reinach, i. 11.

[2] *Monuments Piot*, x. pls. 6-7.

[3] On the later development of imitation of metal in vases see Rizzo in *Röm. Mitth.* xii. (1897), p. 253 ff.

[4] See also on these vases *Gaz. Arch.* 1879, pl. 6, p. 38 ff., and Martha, *L'Art Étrusque*, p. 488. They are styled by Gamurrini "Etrusco-Campanian."

[5] *Amer. Journ. of Arch.* 1885, pl. 1.

striving after outward show on the part of those who were unable to afford the more precious metal for their household utensils, and were forced to be content with imitating it to the best of their ability in the humbler material.

In Greece this tendency is best illustrated by a series of vases known as Megarian or Homeric bowls, of hemispherical form,[1] without handles. The former name was given to them by Dumont[2] and Benndorf,[3] but with little authority beyond the fact that several were found at Megara. But they might on equally good grounds be called Boeotian, others having been found at Thebes and elsewhere in the neighbourhood. They have also been found in Kalymnos, Crete, and Cyprus, but the majority are from Thebes, Tanagra, and Anthedon. Professor Robert thinks they may be identified with the *vasa Samia* so often mentioned by ancient writers (see Chapter XXII.), and refers to the μαστοί dedicated at Oropos and Paphos.[4] All are of red clay, with a thin metallic black glaze giving a quasi-metallic appearance; the hemispherical form is only departed from in one or two instances.[5]

The other name, Homeric, has been applied to them by Professor Robert with reference to the well-known passage of Suetonius, which describes Nero as using bowls (*scyphi*) called Homeric because they were chased with subjects from Homer's poems.[6] Our clay examples would then be reproductions of the chased metal vases, used by those who could not afford originals, and corresponding in some degree to modern plaster casts. It is true that only five of the examples we possess have subjects from Homer; but most of the others may be so called as belonging to the Epic cycle. They thus differ from most relief-vases of the period, in that the designs are not purely decorative or repetitions of simple motives, but are, so to speak, "illustrations of the classics."

Professor Robert distinguishes two classes: (1) those with figures made from separate stamps, attached to the vase after

[1] To this the name μαστός has been given: cf. p. 186.

[2] *Céramiques*, i. p. 393.

[3] *Gr. u. sic. Vasenb.* p. 117.

[4] *Homerische Becher*, in 50*tes Winckelmannsfestprogr.* (1890).

[5] G 104 in B.M. and the jug by Dionysios (Robert, *op. cit.* p. 90).

[6] *Op. cit.* p. 1 ff.: cf. Suet. *Ner.* 47.

it was made, and often repeated; (2) vases made wholly, figures and all, in a mould, like the Arretine wares.[1] In the latter case they were doubtless made from the same moulds as the metal vases, and of this we have an undoubted example, not indeed among the "Megarian" bowls, but in analogous specimens from Italy. It has already been noted (p. 134) that in the British Museum there are two examples of a silver bowl with *repoussé* designs, representing round the interior four deities in chariots, which form part of a silver treasure found at Èze in the south of France; and that in the same collection there is also a clay bowl (*Cat.* G 118 = Plate XLVIII., fig. 5) which exactly reproduces the silver vase in shape, size, and decoration.

Among the subjects we have the rape of Persephone[2]; the sacrifice of Iphigeneia; Achilles and Priam[3]; the flight to the ships (from the *Iliad*), the sack of Troy and the sacrifice of Polyxena; the destruction of the suitors (from the *Odyssey*). From the Theban legend we have the stories of Oedipus's childhood and the Seven against Thebes[4]; other vases give the labours of Herakles or his rape of Auge (Plate XLVIII., fig. 2)[5]; and a jug made by Dionysios has the interesting subject of Autolykos and Sisyphos.[6] The British Museum possesses a very interesting bowl with scenes taken directly from the *Phoenissae* of Euripides,[7] and other comparisons with that author may be made in the case of the bowls with Iphigeneia and Polyxena. Sometimes the scenes are inscribed with verses from the poems or plays illustrated, or with a prose description of the scene,[8] or merely with the names of the figures. The letters in all cases are raised. It is clear that all these bowls belong to the same period and fabric, and many small details point to the third century as their date. We may bear in mind that this was the time of the great revival of Homeric study at Alexandria.

[1] Clay moulds for these bowls have been found at Athens, suggesting that there was a fabric there. But they were probably not confined to one centre. See *Ath. Mitth.* 1901, p. 67, note.

[2] *J.H.S.* xxii. p. 3.

[3] *Arch. Anzeiger*, 1904, p. 191 (in Oxford).

[4] Cf. *Mon. Grecs*, 1885-88, p. 48.

[5] Berlin 2891, from Crete.

[6] See Robert, *op. cit.* p. 90. In the same work will be found full descriptions of most of the other bowls.

[7] See *Class. Review*, 1894, p. 325.

[8] *E.g.* G 105, in B.M.

GREEK VASES OF HELLENISTIC PERIOD: BLACK WARE WITH RELIEFS (BRITISH MUSEUM).

In Italy the introduction of relief wares became general as painting was abandoned, but did so gradually, not suddenly. In the third century both existed side by side. The principle of a purely mechanical process in pottery, which now first appears in the manufacture from a mould, was not, strictly speaking, a new one in Italy, nor yet in Greece. It is first seen in the early Etruscan and Rhodian vases (see p. 496) with stamped and rolled-out designs repeated in long friezes. And we shall see later how for several centuries moulded vases, in the form of *bucchero* ware, formed the national pottery of Etruria. There was always in Etruscan, as also in Greek pottery,[1] a tendency towards the imitation of metal, and this tendency about the fourth century seems to have spread over the rest of Italy, even to the Iapygian Peninsula. Thus it is that the vases of Gnatia (p. 488) are largely metallic in form and treatment, with their ribbed bodies and other details. To the same cause is mainly due the series of Capua and Cumae vases which has already been discussed, with its brilliant varnish and gilding. Signor Gamurrini actually gave to the Italian black glaze wares the name of "Etrusco-Campanian."[2] After the disappearance of *bucchero* ware similar vases came to be made at Cervetri, Chiusi, Corneto, and Bolsena, the principal art centres of Etruria. At Bolsena in particular they have been found in considerable numbers; and as this city (*Volsinium novum*) was only founded in 264 B.C., a *terminus post quem* for their date is afforded.

A group of vases found chiefly at the last-named place[3] does not appear to have been covered with black varnish, but with a metallic preparation of gold or silver, which has now mostly disappeared, and they are left with the plain glazed clay. Some of these are not without merit. In the general arrangement of the designs, usually in friezes round the shoulder, there is obviously a reminiscence of *bucchero* ware. The metallic preparation with which they were covered may have been something of the kind which Athenaeus[4]

[1] See above, p. 495.
[2] See above, p. 498.
[3] B.M. G 179 ff.: see *Ann. dell' Inst.* 1871, p. 5 ff.; *Röm. Mitth.* 1897, p. 260; *Notizie degli Scavi*, 1897, p. 390.
[4] xi. 480 E: see above, pp. 73, 189.

describes in speaking of certain drinking-cups made at Naukratis, which "were dipped [in some preparation] so as to appear silver."

In Italy the manufacture of vases of black ware with reliefs appears to have centred at Cales in Campania during the third century.[1] The principal type is that of a bowl, not of the hemispherical form, but shallow, with the designs in the interior, either in the form of a frieze or of a central medallion. These are usually called Calene phialae, but it is not certain whether the majority were really made at Cales. At all events, it is, like "Megarian bowl," a convenient name for the class. The British Museum bowl G 118, with the frieze of chariots (see above), is a good example of the frieze type of design. The subject, which is treated in a very spirited manner, is the apotheosis of Herakles, who is conducted by Athena, Ares, and Artemis to Olympos, accompanied by Victories. There is also a good specimen in Berlin (*Cat.* 3882) with Odysseus and the Sirens. Another with decorative patterns only, bears the signature of the potter, L. Canoleios of Cales, in Latin letters.[2] Examples are also given in Plate XLVIII., figs. 3, 5, 6.

Of the type with central medallions comparatively few complete examples exist, but the British Museum possesses a series of fragments on which the medallions have been preserved.[3] The subjects are usually those characteristic of the Alexandrine period: Aphrodite, Adonis, and Erotes; Herakles and Hylas, and others familiar from Theocritus; or Trojan scenes, such as Thetis with the arms of Achilles or Paris attacked by Deiphobos. A unique instance is that of Romulus and Remus suckled by the wolf (G 125). Two names of potters occur—K. Atilius and G. Gabinius. The date of these phialae is probably that of the Second Punic War (about 230—200 B.C.). The designs, being taken from moulds[4] and inserted separately, are frequently repeated. The fashion—obviously another

[1] *Gaz. Arch.* 1879, p. 43. Recent writers have maintained that "Calene" ware is Greek in origin, and not confined to this site. See Dragendorff in *Bonner Jahrbücher*, xcvi. p. 25, and Rizzo in *Röm. Mitth.* 1897, p. 259: cf. Berlin 3882.

[2] Benndorf, *Gr. u. sic. Vasenb.* pl. 56.

[3] *Ibid.* pls. 57-8.

[4] For instances of moulds for these medallions see *B.M. Cat. of Terracottas*, E 72-4.

instance of imitation of metal[1]—of adorning bowls with central designs also takes other forms at this period. Simple heads of deities or Satyrs are found, and there are also instances of facsimiles of Syracusan coins. Two bowls in the British Museum (G 121-22) have in the centre copies of a decadrachm with the head of Persephone (Plate XLVIII., fig. 4: cf. p. 210).[2]

Analogous to these in character and technique are the series of small lamp-feeders or *gutti*, a variation of the *askos* form, which are found chiefly in Southern Italy, but also in North Africa and the Eastern Mediterranean.[3] In the latter case they are usually distinguished by having an arched handle over the back instead of the usual ring-handle at the side, and the body is flatter. The Italian type has a deep ribbed body, with a flat circular space on the top containing a design in relief, made separately and inserted in the vase (Plate XLVIII., fig. 1). The range of subjects is wide, but the majority are mythological: heads or masks of a Dionysiac character or of Medusa form a large proportion of the whole.

Larger vases of black ware with reliefs inserted or attached are sometimes found, but are not common. The British Museum possesses two good specimens—a krater (G 29) with panels inserted bearing mythological designs,[4] and a large covered jar (G 28) with the inscription BASSVS in Roman letters, presumably the potter's name. The subjects, in two friezes, represent Erotes and festoons of vine-leaves, and Poseidon and Victory, five times repeated.

The series of vases which we have been discussing are clearly paving the way for the new development of pottery which prevailed throughout the Roman period—that of the ware formerly known as Samian, but now usually spoken of as Arretine or (a more comprehensive term) *Terra sigillata*. This will of course be more appropriately dealt with in a subsequent chapter under the heading of Roman Pottery.

[1] See *Röm. Mitth.* 1897, p. 260.

[2] See Evans, *Syracusan Medallions*, in *Num. Chron.* 3rd Ser. xi. p. 319; also *Rev. Arch.* xxiv. (1894). p. 173.

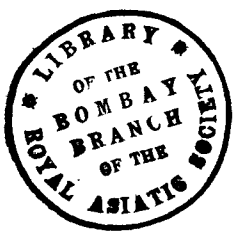
[3] See *B.M. Cat. of Vases*, iv., G 37 ff., and above, pp. 200, 211.

[4] A similar example is in the Athens Museum, from Crete (*Invent.* No. 2141).

In the course of the second century the Roman dominion spread over most of the Greek lands, and Greek art as an independent entity almost ceased to exist. It is, however, not a little remarkable at what a late date some forms of distinctively Greek pottery lingered on in Hellenic regions, such as Attica, Egypt, and Southern Russia. The subject has hitherto received but little attention, and the materials have hardly been collected with sufficient completeness to admit of adequate discussion and classification.[1]

[1] Reference may be made generally to important articles by Watzinger in *Ath. Mitth.* 1901, p. 50 ff., and Dragendorff in *Bonner Jahrbücher*, ci. p. 140 ff.; also (for Egypt) to *Amer. Journ. of Arch.* 1885, p. 18 ff., and Furtwaengler in *Gr. Vasenm.* p. 205 ff. See also Chapter XXII., and XXI. *init.*

END OF VOL. I.



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